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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels, Jr. Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue Indianapolis, Indiana 46204 (317) 232-8603 Toll Free (800) 451-6027 www.idem.IN.gov

VIA ELECTRONIC MAIL

January 6, 2012

Mr. Rinzer Williams, III, J.D., Director Gary Sanitary District 3600 West Third Avenue Gary, Indiana 46402

Dear Mr. Williams:

Re: Draft NPDES Permit No. IN0022977
Gary Sanitary District Wastewater Treatment Plant
Lake County

Your application and supporting documents have been reviewed and processed in accordance with rules adopted under 327 IAC 5. Enclosed is draft NPDES Permit No. IN0022977 which applies to the discharge from the Gary Sanitary District Wastewater Treatment Plant.

Pursuant to IC 13-15-5-1, IDEM will publish a general notice in the newspaper with the largest general circulation within Lake County. A 30-day comment period is available in order to solicit input from interested parties, including the general public.

Please review this document carefully and become familiar with the proposed terms and conditions. Comments concerning the draft permit should be submitted in accordance with the procedure outlined in the enclosed public notice form. Questions concerning this draft permit may be addressed to Bill Stenner at 317/233-1449.

erry Dittmer, Chief

Municipal NPDES Permits Section

Office of Water Quality

Enclosures

cc:

Lake County Health Department

Mr. Don Smales, GSD Superintendent

Mr. James Cherry, GSD, Operator of Record

Mr. Bob Theodorou, GSD, Laboratory and IPP Manager

Mr. Brett Barber, Greeley and Hansen

Mr. James B. Meyer, Meyer & Wyatt, P.C.

Mr. Arnie Muzumdar, North-West Engineering Co., Inc.

Mr. Lyman Welch, Alliance for the Great Lakes

Ms. Olga Lyandres, Alliance for the Great Lakes

Ms. Janet Pellegrini, U.S. EPA, Region 5

Mr. Patrick F. Kuefler, U.S. EPA Region 5

Mr. Russell Martin, U.S. EPA, Region 5

Mr. Jonathan Schweitzer, U.S. EPA, Region 5

Ms. Jodie Opie, U.S. EPA, Region 5

NWRO

STATE OF INDIANA

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

AUTHORIZATION TO DISCHARGE UNDER THE

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1251 et seq., the "Act"), Title 13 of the Indiana Code, and regulations adopted by the Water Pollution Control Board, the Indiana Department of Environmental Management (IDEM) is issuing this permit to the

GARY SANITARY DISTRICT

Sanitary District Wastewater Treatment Plant, a major municipal wastewater treatment plant located at 3600 West Third Avenue, Gary, Indiana, Lake County. The permittee is hereby authorized to discharge from the outfalls identified in Part I of this permit to receiving waters named the East Branch of the Grand Calumet River, located within the Lake Michigan drainage basin, in accordance with the effluent limitations, monitoring requirements, and other conditions set forth in the permit. The permittee is also authorized to discharge from combined sewer overflow outfalls listed in Attachment A of this permit, to receiving waters named East Branch of the Grand Calumet River and the West Branch of the Grand Calumet River in accordance with the effluent limitations, monitoring requirements, and other conditions set forth in this permit. This permit may be revoked for the nonpayment of applicable fees in accordance with IC 13-18-20.

Effective Date: _	· · · · · · · · · · · · · · · · · · ·
Expiration Date:	· ·
shall submit such inform of Environmental Manag prior to the expiration da	athorization to discharge beyond the date of expiration, the permittee ation and application forms as are required by the Indiana Department gement. The application shall be submitted to IDEM at least 180 days at e of this permit, unless a later date is allowed by the Commissioner in C 5-3-2 and Part II.A.4 of this permit.
Issued on Management.	, for the Indiana Department of Environmental
	Paul Higginbotham, Chief Permits Branch Office of Water Quality

TREATMENT FACILITY DESCRIPTION

The permittee currently operates a Class IV, 60 MGD average design flow single stage activated sludge treatment facility consisting of a trash rack, four mechanical bar screens, two grit tanks, two cyclone de-gritters, two wet wells, ten primary sedimentation tanks with scum collection systems, six aeration basins, twenty-four secondary clarifiers, phosphorus removal facilities, ten two-cell single media sand filters with mud wells, chlorination/dechlorination facilities, and influent and effluent flow meters. Treatment of sludge includes gravity thickeners, anaerobic digestion and filter belt presses. Final solids are disposed of via landfill.

The collection system is comprised of combined sanitary and storm sewers with 12 Combined Sewer Overflow (CSO) locations. The CSO locations have been identified and permitted with provisions in Attachment A of the permit.

The mass limits for CBOD₅, TSS, ammonia-nitrogen and total residual chloride have been calculated utilizing the peak design flow of 120 MGD. This is to facilitate the maximization of flow through the treatment facility in accordance with this Office's CSO policy.

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge from the outfall listed below in accordance with the terms and conditions of this permit. The permittee shall take samples and measurements at a location representative of each discharge to determine whether the effluent limitations have been met. Refer to Part I.B of this permit for additional monitoring and reporting requirements.

1. Beginning on the effective date of this permit, the permittee is authorized to discharge from Outfall 001A and Outfall 001B, each located at Latitude: 41° 36' 29" N, Longitude: 87° 23' 19" W. The discharge is subject to the following requirements:

	Quantity	Quantity or Loading		Quality or Concentration			Monitoring Requirements	
<u>Parameter</u>	Monthly Average	Weekly <u>Average</u>	<u>Units</u>	Monthly Average	Weekly <u>Average</u>	<u>Units</u>	Measurement Frequency	Sample <u>Type</u>
Flow [1] CBOD ₅	Report	pa and tab and	MGD	-0.0 to to to			Daily	24-Hr. Total
Summer [2]	5,007	7,511	lbs/day	5.0	7.5	mg/l	Daily	24-Hr. Composite
Winter [3]	8,812	13,218	lbs/day	8.8	13.2	mg/l	Daily	24-Hr. Composite
TSS								
Summer [2]	6,008	9,013	lbs/day	6.0	9.0	mg/l	Daily	24-Hr. Composite
Winter [3]	9,613	14,420	lbs/day	9.6	14.4	mg/l	Daily	24-Hr. Composite
Phosphorus [4]				1.0		mg/l	Daily	24-Hr. Composite

TABLE 2

	Quality o	r Concentr	ation	Monitoring Requirements		
<u>Parameter</u>	Daily <u>Minimum</u>	Monthly <u>Average</u>	Daily <u>Maximur</u>	m <u>Units</u>	Measurement <u>Frequency</u>	Sample <u>Type</u>
pH [5] Dissolved Oxygen [6]	6.0	mp and see Ma	9.0	s.u.	Daily	Grab
Summer [2]	6.0			mg/l	Daily	12 Grabs/24-Hrs.
Winter [3]	5.0			mg/l	Daily	12 Grabs/24-Hrs.
Oil & Grease			10	mg/l	5 X Weekly	Grab
E. coli [7]		125 [8]	235 [9]	cfu/100 ml	Daily	Grab

TABLE 3

<u>Parameter</u>	Quantity of Monthly Average	or Loading Daily <u>Maximum</u>	<u>Units</u>	Quality or Monthly Average	Concentra Daily <u>Maximum</u>		Monitoring Req Measurement Frequency	uirements Sample <u>Type</u>
Ammonia-nitrogen								
Summer [2]	1,001	2,333	lbs/day	1.00	2.33	mg/l	Daily	24-Hr. Composite
Winter [3]	1,132	2,634	lbs/day	1.13	2.63	mg/l	Daily	24-Hr. Composite
Total Residual Chlorine [10]					•	•	•
Final[11]	8	18	lbs/day	0.008	0.018	mg/l	Daily	Grab
Whole Effluent Toxicity [12]								
Acute					1.0	TUa	2 X Annually	24-Hr. Composite
Chronic				2.2	AT 40 10 M	TUc	2 X Annually	24-Hr. Composite

- [1] Effluent flow measurement is required per 327 IAC 5-2-13. The flow meter(s) shall be calibrated at least once annually.
- [2] Summer limitations apply from May 1 through November 30 of each year.
- [3] Winter limitations apply from December 1 through April 30 of each year.
- [4] In accordance with 327 IAC 5-10-2(b), the facility must produce an effluent containing no more than 1.0 mg/l total phosphorus (P) any month that the average phosphorus level in the raw sewage is greater than 5 mg/l. Otherwise, a degree of reduction, as prescribed below, must be achieved. Such reduction is to be calculated based on monthly average raw and final concentrations.

Phosphorus (P) Level	Required
in Raw Sewage (mg/l)	Removal (%)
greater than or equal to 4	80%
less than 4, greater than or equal to 3	75%
less than 3, greater than or equal to 2	70%
less than 2, greater than or equal to 1	65%
less than 1	60%

- [5] If the permittee collects more than one grab sample on a given day for pH, the values shall not be averaged for reporting daily maximums or daily minimums. The permittee must report the minimum and maximum pH values of any individual samples during the month on the Discharge Monitoring Report forms.
- [6] The daily minimum concentration of dissolved oxygen in the effluent shall be reported as the arithmetic mean determined by summation of the twelve (12) daily grab sample results divided by the number of daily grab samples. These samples are to be collected over equal time intervals.
- [7] The *Escherichia coli (E. coli)* limitations apply from April 1 through October 31 annually. IDEM has specified the following methods as allowable for the detection and enumeration of *Escherichia coli (E. coli)*:
 - 1. Coliscan MF® Method
 - 2. EPA Method 1103.1 using original m-TEC agar.
 - 3. EPA revised Method 1103.1 using modified m-TEC agar.
 - 4. Standard Methods 20th Edition Method 9223 B using Colilert®
- [8] The monthly average *E. coli* value shall be calculated as a geometric mean. Per 327 IAC 5-10-6, the concentration of *E. coli* shall not exceed one hundred twenty-five (125) cfu or mpn per 100 milliliters as a geometric mean of the effluent samples taken in a calendar month. No samples may be excluded when calculating the monthly geometric mean.
- [9] If less than ten samples are taken and analyzed for *E. coli* in a calendar month, no samples may exceed two hundred thirty-five (235) cfu or mpn as a daily maximum. However, when ten (10) or more samples are taken and analyzed for *E. coli* in a calendar month, not more than ten percent (10%) of those samples may exceed two hundred thirty-five (235) cfu or mpn as a daily maximum. When calculating ten percent, the result must not be rounded up. In reporting for compliance purposes on the Discharge Monitoring Report (DMR) form, the permittee shall record the highest non-excluded value for the daily maximum.
- [10] The effluent shall be disinfected on a continuous basis such that violations of the *E. coli* limitations do not occur from April 1 through October 31, annually. If the permittee uses chlorine for any reason, at any time including the period from November 1 through March 31, then the limits and monitoring requirements in Table 3 for Total Residual Chlorine (TRC) shall be in effect whenever a chlorine-based disinfectant is used.
- [11]The monthly average Water Quality-Based Effluent Limit (WQBEL) for total residual chlorine is less than the Limit of Quantitation (LOQ) as specified below. Compliance with the total residual chlorine concentration limitations will be demonstrated if the monthly average effluent level is less than or equal to the monthly average WQBEL. For the purpose of calculating the monthly average value, the daily effluent values that are less than the LOQ may be assigned a value of zero (0), unless, after considering the number of monitoring results that are greater than the Limit of Detection (LOD), and applying appropriate statistical techniques, a value other than zero (0) is warranted.

The daily maximum WQBEL for total residual chlorine is greater than or equal to the LOD value, but less than the LOQ value specified in the permit. Compliance with this effluent limitation will be demonstrated if the measured daily effluent concentrations are less than the LOQ. For daily maximum mass limitations based on WQBELs which are less than the LOQ value, compliance with the daily maximum mass value is based on the LOQ value. Compliance with the daily maximum mass value will be demonstrated if the calculated mass value is less than **60.1** lbs/day.

At present, two methods are acceptable to IDEM measure total residual chlorine: amperometric and DPD colorimetric methods.

<u>Parameter</u> <u>LOD</u> <u>LOQ</u> Chlorine 0.02 mg/l 0.06 mg/l

Case-Specific MDL

The permittee may determine a case-specific Method Detection Level (MDL) using the analytical method specified above. The MDL shall be derived by the procedure specified for MDLs contained in 40 CFR Part 136, Appendix B, and the limit of quantitation shall be set equal to 3.18 times the MDL. Other methods may be used if first approved by the U.S. EPA and IDEM.

[12] Please refer to Part I.D of this permit for Whole Effluent Toxicity requirements. The permittee is to report the more stringent of the results for the two test species (Fathead Minnow or *Ceriodaphnia dubia*) on the Discharge Monitoring Report forms. Please note that complete Whole Effluent Toxicity reports are required to be submitted to this Office's Compliance Data Section. In the event that the permittee is required to implement a toxicity reduction evaluation (TRE), WET monitoring frequencies will revert to the schedule outlined in Part I.D.2.e.

2. Minimum Narrative Limitations

At all times the discharge from any and all point sources specified within this permit shall not cause receiving waters:

- a. including the mixing zone, to contain substances, materials, floating debris, oil, or scum:
 - (1) that will settle to form putrescent or otherwise objectionable deposits;
 - (2) that are in amounts sufficient to be unsightly or deleterious;
 - (3) that produce color, visible oil sheen, odor, or other conditions in such degree as to create a nuisance;
 - (4) which are in amounts sufficient to be acutely toxic to, or to otherwise severely injure or kill aquatic life, other animals, plants, or humans in accordance with 327 IAC 2-1.5-8(b)(1)(E);

- (5) which are in concentrations or combinations that will cause or contribute to the growth of aquatic plants or algae to such a degree as to create a nuisance, be unsightly, or otherwise impair the designated uses.
- b. outside the mixing zone, to contain substances in concentrations which on the basis of available scientific data are believed to be sufficient to injure, be chronically toxic to, or be carcinogenic, mutagenic, or teratogenic to humans, animals, aquatic life, or plants in accordance with 327 IAC 2-1.5-8(b)(2).

3. Additional Discharge Limitations and Monitoring Requirements

Beginning on the effective date of the permit, the effluent from Outfall 001A and Outfall 001B shall be limited and monitored by the permittee as follows:

TABLE 4

	Quantity of	or Loading Daily		Quality or Monthly	Concentration Daily	l	Monitoring Req Measurement	uirements Sample
<u>Parameter</u>	Average	Maximum	<u>Units</u>	Average	Maximum	<u>Units</u>	Frequency	Type
Arsenic [1]		Report	lbs/day		Report	mg/l	Quarterly	24 Hr. Comp.
Cadmium [1]		Report	lbs/day		Report	mg/l	Quarterly	24 Hr. Comp.
Chromium [1]		Report	lbs/day		Report	mg/l	Quarterly	24 Hr. Comp.
Copper [1]		Report	lbs/day		Report	mg/l	Quarterly	24 Hr. Comp.
Cyanide [1]		Report	lbs/day		Report	mg/l	Quarterly	See [2] Below
Iron [1]		Report	lbs/day		Report	mg/l	Quarterly	24 Hr. Comp.
Lead [1]		Report	lbs/day		Report	mg/l	Quarterly	24 Hr. Comp.
Mercury [1] [3]								_
WQBELs [4]	0.00065	0.0016	lbs/day	1.3	3.16	ng/l	6 X Annually	Grab
Interim Discharge								
Limit [5]				3.05	Report	ng/l	6 X Annually	Grab
Nickel [1]		Report	lbs/day		Report	mg/l	Quarterly	24 Hr. Comp.
Zinc [1]	95	195	lbs/day	0.19	0.39	mg/l	1 X Weekly	24 Hr. Comp.
Phenols [4AAP]		Report	lbs/day		Report	mg/l	Quarterly	24 Hr. Comp.
Chloride [1]		Report	lbs/day		Report	mg/l	Quarterly	24 Hr. Comp.
Sulfate [1]		Report	lbs/day		Report	mg/l	Quarterly	24 Hr. Comp.
Fluoride [1]		Report	lbs/day		Report	mg/l	Quarterly	24 Hr. Comp.

Note: For measurement frequencies less than once per month, the permittee shall report the result from the monitoring period on the Discharge Monitoring Report (DMR) for the final month of the reporting timeframe, beginning with January of each year. For example, for quarterly monitoring, the permittee may conduct sampling within the month of January, February or March. The result from this reporting timeframe shall be reported on the March DMR, regardless of which of the months within the quarter the sample was taken.

[1] The permittee shall measure and report this parameter as Total Recoverable Metal. Cyanide shall be reported as Free Cyanide or Cyanide Amenable to Chlorination. The following EPA test methods and/or Standard Methods and associated Limits of Detection (LODs) and Limits of Quantitation (LOQs) are recommended for use in the analysis of the effluent samples.

Alternative 40 CFR 136 approved methods may be used provided the LOD is less than the monthly average and/or daily maximum effluent limitations.

The permittee may determine a case-specific Method Detection Level (MDL) using one of the analytical methods specified below, or any other test method which is approved by IDEM prior to use. The MDL shall be derived by the procedure specified for MDLs contained in 40 CFR Part 136, Appendix B, and the limit of quantitation shall be set equal to 3.18 times the MDL. NOTE: The MDL for purposes of this document, is synonymous with the "limit of detection" or "LOD" as defined in 327 IAC 5-1.5-26: "the minimum concentration of a substance that can be measured and reported with ninety-nine percent (99%) confidence that the analyte concentration is greater than zero (0) for a particular analytical method and sample matrix".

Parameter Arsenic Cadmium Chloride Chromium Copper Cyanide, Free Cyanide, Free Iron Fluoride Lead Mercury Nickel Phenols, Total (4AAP)	EPA/Standard Method 3113 B 3113 B 4500 Cl-E 3111 C or 3113 B 3113 B 4500 CN-G 1677 3113 B 340.3 4500-F C 3113 B 1631, Revision E 3113 B 420.2	LOD 1.0 ug/l 0.1 ug/l 1000 ug/l 2.0 ug/l 1.0 ug/l 5.0 ug/l 0.5 ug/l 1.0 ug/l 1.0 ug/l 1.0 ug/l 1.0 ug/l 0.2 ng/l 1.0 ug/l 0.6 ug/l	LOQ 3.2 ug/l 0.32 ug/l 3200 ug/l 6.4 ug/l 3.2 ug/l 16.0 ug/l 1.6 ug/l 3.2 ug/l 50 ug/l 3.2 ug/l 0.5 ng/l 3.2 ug/l 2 ug/l
	r	U .	
Sulfate Zinc	375.2, Revision 2.0 200.7, Revision 4.4 or 3120 B	3000 ug/l 2.0 ug/l	9500 ug/l 6.4 ug/l

[2] The maximum holding time is 24 hours when sulfide is present. Therefore, initially the CN sample should be a grab sample that is tested with lead acetate paper before pH adjustments in order to determine if sulfide is present. If sulfide is present, it can be removed by the addition of cadmium nitrate powder until a negative spot test is obtained. The sample is filtered and then NaOH is added to pH 12. The sample may then be analyzed within 14 days.

Alternatively, if the permittee can demonstrate that the wastewater contains no sulfide, the permittee may collect a composite sample and analyze it within 14 days.

[3] Mercury monitoring shall be conducted six times annually (i.e. every other month) for the term of the permit. Monitoring shall be conducted in the months of February, April, June, August, October, and December of each year. Mercury monitoring and analysis will be performed using EPA Test Method 1631, Revision E. If Method 1631, Revision E is further revised during the term of this permit, the permittee and/or its contract laboratory is required to utilize the most current version of the method immediately after approval by EPA.

- [4] The permittee applied for, and received, a variance from the water quality criterion used to establish the referenced mercury WQBELs under the streamlined mercury variance (SMV) procedures of 327 IAC 5-3.5. Compliance with the interim discharge limit will demonstrate compliance with this permit.
- [5] For the term of the NPDES permit, the permittee is subject to the interim discharge limit developed under the provisions of 327 IAC 5-3.5-8. Each reporting period (i.e., bi-monthly), the permittee shall report both a daily maximum value and an annual average value for mercury. The annual average value is to be calculated as the average of daily maximum values for mercury measured over the most recent (rolling) twelve-month period. Reporting of the annual average value for mercury is not required during the first year of the permit term. Compliance with the interim discharge limit will be achieved when the average of daily values measured over the most recent (rolling) twelve-month period is less than the interim discharge limit.

4. Additional Monitoring Requirements

Beginning on the effective date of this permit, the permittee shall conduct the following monitoring activities:

a. Influent Monitoring

In addition to the requirements contained in Part I.B.2 of the NPDES permit, the permittee shall monitor the influent to its wastewater treatment facility for the following pollutants. Samples shall be representative of the raw influent in accordance with 327 IAC 5-2-13(b).

TABLE 5

	Quality or Co	ncentration	Monitoring Requirements		
<u>Parameter</u>	Monthly Average	Daily <u>Maximum</u>	Unit	Measurement Frequency	Sample <u>Type</u>
Arsenic [1]	Report	Report	mg/l	Quarterly	24 Hr. Comp.
Cadmium [1]	Report	Report	mg/l	Quarterly	24 Hr. Comp.
Chromium [1]	Report	Report	mg/l	Quarterly	24 Hr. Comp.
Copper [1]	Report	Report	mg/l	Quarterly	24 Hr. Comp.
Cyanide [1]	Report	Report	mg/l	Quarterly	See [2] Below
Iron [1]	Report	Report	mg/l	Quarterly	24 Hr. Comp.
Lead [1]	Report	Report	mg/l	Quarterly	24 Hr. Comp.
Mercury [1][3]		Report	ng/l	6 X Annually	Grab
Nickel [1]	Report	Report	mg/l	Quarterly	24 Hr. Comp.
Zinc [1]	Report	Report	mg/l	2 X Monthly	24 Hr. Comp.
Phenols [4AAP]	Report	Report	mg/l	Quarterly	24 Hr. Comp.
Chloride	Report	Report	mg/l	Quarterly	24 Hr. Comp.
Sulfate	Report	Report	mg/l	Quarterly	24 Hr. Comp.
Fluoride	Report	Report	mg/l	Quarterly	24 Hr. Comp.

Note: For measurement frequencies less than once per month, the permittee shall report the result from the monitoring period on the Discharge Monitoring Report (DMR) for the final month of the reporting timeframe, beginning with January of each year. For example, for quarterly monitoring, the permittee may conduct sampling within the month of January, February or March. The result from this reporting timeframe shall be reported on the March DMR, regardless of which of the months within the quarter the sample was taken.

- [1] The permittee shall measure and report this parameter as Total Recoverable Metal. Cyanide shall be reported as Free Cyanide or Cyanide Amenable to Chlorination.
- [2] The maximum holding time is 24 hours when sulfide is present. Therefore, initially the CN sample should be a grab sample that is tested with lead acetate paper before pH adjustments in order to determine if sulfide is present. If sulfide is present, it can be removed by the addition of cadmium nitrate powder until a negative spot test is obtained. The sample is filtered and then NaOH is added to pH 12. The sample may then be analyzed within 14 days. Alternatively, if the permittee can demonstrate that the wastewater contains no sulfide, the permittee may collect a composite sample and analyze it within 14 days.
- [3] Mercury monitoring shall be conducted six times annually (i.e. every other month) for the term of the permit. Monitoring shall be conducted in the months of February, April, June, August, October, and December of each year. Mercury monitoring and analysis will be performed using EPA Test Method 1631, Revision E. If Method 1631, Revision E is further revised during the term of this permit, the permittee and/or its contract laboratory is required to utilize the most current version of the method immediately after approval by EPA.

b. Organic Pollutant Monitoring

The permittee shall conduct an annual inventory of organic pollutants (see 40 CFR 423, Appendix A) and shall identify and quantify additional organic compounds which occur in the influent, effluent, and sludge. The analytical report shall be sent to the Pretreatment Group. This report is due in December of each year. The inventory shall consist of:

(1) Sampling and Analysis of Influent and Effluent

Sampling shall be conducted on a day when industrial discharges are occurring at normal or maximum levels. The samples shall be 24-hour flow proportional composites, except for volatile organics, which shall be taken by appropriate grab sampling techniques. Analysis for the U.S. EPA organic priority pollutants shall be performed using U.S. EPA methods 624, 625 and 608 in 40 CFR 136, or other equivalent methods approved by U.S. EPA. Equivalent methods must be at least as sensitive and specific as methods 624, 625 and 608.

All samples must be collected, preserved and stored in accordance with 40 CFR 136, Appendix A. Samples for volatile organics must be analyzed within 14 days of collection. Samples for semivolatile organics, PCBs and pesticides must be extracted within 7 days of collection and analyzed within 40 days of extraction. For composite samples, the collection date shall be the date at the end of the daily collection period.

(2) Sampling and Analysis of Sludge

Sampling collection, storage, and analysis shall conform to the U.S. EPA recommended procedures in accordance with 40 CFR 503. Special sampling and/or preservation techniques will be required for those pollutants which deteriorate rapidly.

Sludge samples for volatile organics must be analyzed within 14 days of collection. Sludge samples for semivolatile organics, PCBs and pesticides must be extracted within 14 days of collection and analyzed within 40 days of extraction.

(3) Additional Pollutant Identification

In addition to the priority pollutants, a reasonable attempt shall be made to identify and quantify the ten most abundant constituents of each fraction (excluding priority pollutants and unsubstituted aliphatic compounds) shown to be present by peaks on the total ion plots (reconstructed gas chromatograms) more than ten times higher than the adjacent background noise. Identification shall be attempted through the use of U.S. EPA/NIH computerized library of mass spectra, with visual confirmation by an experienced analyst. Quantification may be based on an order of magnitude estimate based upon comparison with an internal standard.

The annual pretreatment program report, required by Part III. A.7. of this permit, should identify the additional steps necessary to determine whether the pollutants that are present interfere, pass through, or otherwise violate 40 CFR 403.2. Upon such determination, the report must also identify the steps taken to develop and enforce local limitations on industrial discharges for those pollutants. This is a requirement of 40 CFR 403.5.

B. MONITORING AND REPORTING

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge flow and shall be taken at times which reflect the full range and concentration of effluent parameters normally expected to be present. Samples shall not be taken at times to avoid showing elevated levels of any parameters.

2. Data on Plant Operation

The raw influent and the wastewater from intermediate unit treatment processes, as well as the final effluent shall be sampled and analyzed for the pollutants and operational parameters specified by the applicable Monthly Report of Operation Form, as appropriate, in accordance with 327 IAC 5-2-13. Except where the permit specifically states otherwise, the sample frequency for the raw influent and intermediate unit treatment process shall be at a minimum the same frequency as that for the final effluent. The measurement frequencies specified in each of the tables in Part I.A. are the minimum frequencies required by this permit.

3. Monthly Reporting

The permittee shall submit accurate monitoring reports to the Indiana Department of Environmental Management containing results obtained during the previous month and shall be postmarked no later than the 28th day of the month following each completed monitoring period. The first report shall be submitted by the 28th day of the month following the month in which the permit becomes effective. These reports shall include, but not necessarily be limited to, the Discharge Monitoring Report (DMR) and the Monthly Report of Operation (MRO). Permittees with metals monitoring requirements shall also complete and submit the Indiana Monthly Monitoring Report Form (MMR-State Form 30530) to report their influent and/or effluent data for metals and other toxics. Permittees with combined sewer overflow discharges must also submit the CSO Discharge Monitoring Report to IDEM by the 28th day of the month following each completed monitoring period. All reports shall be mailed to IDEM, Office of Water Quality – Mail Code 65-42, Compliance Data Section, 100 North Senate Ave., Indianapolis, Indiana 46204-2251. The Regional Administrator may request the permittee to submit monitoring reports to the Environmental Protection Agency if it is deemed necessary to assure compliance with the permit.

A calendar week will begin on Sunday and end on Saturday. Partial weeks consisting of four or more days at the end of any month will include the remaining days of the week, which occur in the following month in order to calculate a consecutive seven-day average. This value will be reported as a weekly average or seven-day average on the MRO for the month containing the partial week of four or more days. Partial calendar weeks consisting of less than four days at the end of any month will be carried forward to the succeeding month and reported as a weekly average or a seven-day average for the calendar week that ends with the first Saturday of that month.

4. Definitions

a. Calculation of Averages

Pursuant to 327 IAC 5-2-11(a)(5), the calculation of the average of discharge data shall be determined as follows: For all parameters except *E. coli*, calculations that require averaging of sample analyses or measurements of daily discharges shall use an arithmetic mean unless otherwise specified in this permit. For *E. coli*, the monthly average discharge, as a concentration, shall be calculated as a geometric mean.

b. Terms

- (1) "Monthly Average" -The monthly average discharge means the total mass or flow-weighted concentration of all daily discharges during a calendar month on which daily discharges are sampled or measured, divided by the number of daily discharges sampled and/or measured during such calendar month. The monthly average discharge limitation is the highest allowable average monthly discharge for any calendar month.
- (2) "Weekly Average" The weekly average discharge means the total mass or flow weighted concentration of all daily discharges during any calendar week for which daily discharges are sampled or measured, divided by the number of daily discharges sampled and/or measured during such calendar week. The average weekly discharge limitation is the maximum allowable average weekly discharge for any calendar week.
- (3) "Daily Maximum" The daily maximum discharge limitation is the maximum allowable daily discharge for any calendar day. The "daily discharge" means the total mass of a pollutant discharged during the calendar day or, in the case of a pollutant limited in terms other than mass pursuant to 327 IAC 5-2-11(e), the average concentration or other measurement of the pollutant specified over the calendar day or any twenty-four hour period that represents the calendar day for purposes of sampling.
- (4) "24-hour Composite" A 24-hour composite sample consists of at least twelve (12) individual flow-proportioned samples of wastewater, taken by the grab sample method over equal time intervals during the period of operator attendance or by an automatic sampler, which are taken at approximately equally spaced time or flow volume intervals for the duration of the discharge within a 24-hour period and which are combined prior to analysis. If an equal time interval flow proportioned sample is used (rather than an equal flow interval based method) the sample may be obtained by:
 - (a) recording the discharge flow rate at the time each individual sample is taken,

- (b) adding together the discharge flow rates recorded from each individual sampling time to formulate the "total flow value,"
- (c) dividing the discharge flow rate of each individual sampling time by the total flow value to determine its percentage of the total flow value, and
- (d) multiplying the volume of the total composite sample by each individual sample's percentage to determine the volume of that individual sample which will be included in the total composite sample.
- (5) CBOD₅: Five-day Carbonaceous Biochemical Oxygen Demand
- (6) TSS: Total Suspended Solids
- (7) E. coli: Escherichia coli bacteria
- (8) The "Regional Administrator" is defined as the Region V Administrator, U.S. EPA, located at 77 West Jackson Boulevard, Chicago, Illinois 60604.
- (9) The "Commissioner" is defined as the Commissioner of the Indiana Department of Environmental Management, located at the following address: 100 North Senate Avenue, Indianapolis, Indiana 46204-2251.
- (10)Limit of Detection or LOD is defined as a measurement of the concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero (0) for a particular analytical method and sample matrix. The LOD is equivalent to the Method Detection Level or MDL.
- (11)Limit of Quantitation or LOQ is defined as a measurement of the concentration of a contaminant obtained by using a specified laboratory procedure calibrated at a specified concentration about the method detection level. It is considered the lowest concentration at which a particular contaminant can be quantitatively measured using a specified laboratory procedure for monitoring of the contaminant. This term is also called the limit of quantification or quantification level.
- (12)Method Detection Level or MDL is defined as the minimum concentration of an analyte (substance) that can be measured and reported with a ninety-nine percent (99%) confidence that the analyte concentration is greater than zero (0) as determined by the procedure set forth in 40 CFR Part 136, Appendix B. The method detection level or MDL is equivalent to the LOD.

5. Test Procedures

The analytical and sampling methods used shall conform to the current version of 40 CFR, Part 136, unless otherwise specified within this permit. Multiple editions of Standard Methods for the Examination of Water and Wastewater are currently approved for most methods, however, 40 CFR Part 136 should be checked to ascertain if a particular method is approved for a particular analyte. The approved methods may be included in the texts listed below. However, different but equivalent methods are allowable if they receive the prior written approval of the State agency and the U.S. Environmental Protection Agency.

- a. Standard Methods for the Examination of Water and Wastewater 18th, 19th, or 20th Editions, 1992, 1995 or 1998 American Public Health Association, Washington, D.C. 20005.
- b. A.S.T.M. Standards, Part 23, Water; Atmospheric Analysis 1972 American Society for Testing and Materials, Philadelphia, PA 19103.
- c. Methods for Chemical Analysis of Water and Wastes
 June 1974, Revised, March 1983, Environmental Protection
 Agency, Water Quality Office, Analytical Quality Control
 Laboratory, 1014 Broadway, Cincinnati, OH 45202.

6. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record and maintain records of all monitoring information and monitoring activities under this permit, including the following information:

- a. The exact place, date, and time of sampling or measurements;
- b. The person(s) who performed the sampling or measurements;
- c. The dates and times the analyses were performed;
- d. The person(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of all required analyses and measurements.

7. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Monthly Discharge Monitoring Report and on the Monthly Report of Operation form. Such increased frequency shall also be indicated on these forms. Any such additional monitoring data which indicates a violation of a permit limitation shall be followed up by the permittee, whenever feasible, with a monitoring sample obtained and analyzed pursuant to approved analytical methods. The results of the follow-up sample shall be reported to the Commissioner in the Monthly Discharge Monitoring Report.

8. Records Retention

All records and information resulting from the monitoring activities required by this permit, including all records of analyses performed and calibration and maintenance of instrumentation and recording from continuous monitoring instrumentation, shall be retained for a minimum of three (3) years. In cases where the original records are kept at another location, a copy of all such records shall be kept at the permitted facility. The three-year period shall be extended:

- a. automatically during the course of any unresolved litigation regarding the discharge of pollutants by the permittee or regarding promulgated effluent guidelines applicable to the permittee; or
- b. as requested by the Regional Administrator or the Indiana Department of Environmental Management.

9. Discharge Monitoring Reports

- a. For parameters with monthly average Water Quality-Based Effluent Limitations (WQBELs) below the Limit of Quantitation (LOQ), daily effluent values that are less than the LOQ, used to determine the monthly average effluent levels less than the LOQ, may be assigned a value of zero (0), unless, after considering the number of monitoring results that are greater than the Limit of Detection (LOD), and applying appropriate statistical techniques, a value other than zero (0) is warranted.
 - b. For all other parameters for which the monthly average WQBEL is equal to or greater than the LOQ, calculations that require averaging of measurements of daily values (both concentration and mass) shall use an arithmetic mean. When a daily discharge value is below the LOQ, a value of zero (0) shall be used for that value in the calculation to determine the monthly average unless otherwise specified or approved by the Commissioner.

- c. Effluent concentrations less than the LOD shall be reported on the Discharge Monitoring Report (DMR) forms as < (less than) the value of the LOD. For example, if a substance is not detected at a concentration of 0.1 μ g/l, report the value as < 0.1 μ g/l.
- d. Effluent concentrations greater than or equal to the LOD and less than the LOQ that are reported on a DMR shall be reported as the actual value and annotated on the DMR to indicate the value is not quantifiable.
- e. Mass discharge values which are calculated from concentrations reported as less than the value of the limit of detection shall be reported as less than the corresponding mass value.
- f. Mass discharge values that are calculated from effluent concentrations greater than the limit of detection shall be reported as the calculated value.

C. REOPENING CLAUSES

In addition to the reopening clause provisions cited at 327 IAC 5-2-16, the following reopening clauses are incorporated into this permit:

- 1. This permit may be modified or, alternately, revoked and reissued after public notice and opportunity for hearing to incorporate effluent limitations reflecting the results of a wasteload allocation if the Department of Environmental Management determines that such effluent limitations are needed to assure that State Water Quality Standards are met in the receiving stream.
- 2. This permit may be modified due to a change in sludge disposal standards pursuant to Section 405(d) of the Clean Water Act, if the standards when promulgated contain different conditions, are otherwise more stringent, or control pollutants not addressed by this permit.
- 3. This permit may be modified, or, alternately, revoked and reissued, to comply with any applicable effluent limitation or standard issued or approved under section 301(b)(2)(C), (D) and (E), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent limitation or standard so issued or approved:
 - a. contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - b. controls any pollutant not limited in the permit.

- 4. This permit may be modified or, alternatively, revoked and reissued after public notice and opportunity for hearing to incorporate monitoring requirements and effluent limitations for arsenic, cadmium, chromium, copper, cyanide, iron, lead, nickel, phenols, chloride, sulfate and fluoride if the Department of Environmental Management determines that such monitoring requirements and effluent limitations are needed to assure that State Water Quality standards are met in the receiving streams.
- 5. This permit may be modified, or alternately, revoked and reissued after public notice and opportunity for hearing to include Whole Effluent Toxicity (WET) limitations or to include limitations for specific toxicants if the results of the biomonitoring and/or the Toxicity Reduction Evaluation (TRE) study indicate that such limitations are necessary.
- 6. This permit may be modified, or alternately, revoked and reissued, after public notice and opportunity for hearing, to include a case-specific Method Detection Level (MDL). The permittee must demonstrate that such action is warranted in accordance with the procedure specified under Appendix B, 40 CFR Part 136, or approved by the Indiana Department of Environmental Management.
- 7. This permit may be modified, or, alternately, revoked and reissued after public notice and opportunity for hearing to include revised mass effluent limitations for CBOD₅, TSS, ammonia-nitrogen and total residual chlorine under IC 13-18-19-2(a)(2) based on a determination by IDEM that stress testing or a comparison of flow values and effluent data demonstrates the capability of sufficient of wastewater treatment exceeding the 120 MGD peak design flow.
- 8. This permit may be modified, or, alternately, revoked and reissued after public notice and opportunity for hearing to include revised Streamlined Mercury Variance (SMV) and/or Pollutant minimization Program Plan (PMPP) requirements in the event that revisions to the SMV Requirements and Application Process under 327 IAC 5-3.5 occur.

D. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

The 1977 Clean Water Act explicitly states, in Section 101(3) that it is the <u>national policy</u> that the discharge of toxic pollutants in toxic amounts be prohibited. In support of this policy the U.S. EPA in 1995 amended the 40 CFR 136.3 (Tables IA and II) by adding testing methods for measuring acute and short-term chronic toxicity of whole effluents and receiving waters. To adequately assess the character of the effluent, and the effects of the effluent on aquatic life, the permittee shall conduct Whole Effluent Toxicity Testing. Part 1 of this section describes the testing procedures, Part 2 describes the Toxicity Reduction Evaluation which is only required if the effluent demonstrates toxicity, as described in paragraph f.

1. Whole Effluent Toxicity Tests

The permittee shall conduct the series of bioassay tests described below to monitor the toxicity of the discharge from Outfalls 001A and 001B. When Outfall 001B is not in use, monitoring of Outfall 001A satisfies the requirements of this provision.

If toxicity is demonstrated as defined under paragraph f below, the permittee is required to conduct a Toxicity Reduction Evaluation (TRE).

- a. Bioassay Test Procedures and Data Analysis
 - (1) All test organisms, test procedures and quality assurance criteria used shall be in accordance with the Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms; Fourth Edition Section 13, Cladoceran (Ceriodaphnia dubia) Survival and Reproduction Test Method 1002.0; and Section 11, Fathead Minnow (Pimephales promelas) Larval Survival and Growth Test Method, (1000.0) EPA 821-R-02-013, October 2002, or most recent update.
 - (2) Any circumstances not covered by the above methods, or that require deviation from the specified methods shall first be approved by the IDEM's Permits Branch Toxicologist.
 - (3) The determination of effluent toxicity shall be made in accordance with the Data Analysis general procedures for chronic toxicity endpoints as outlined in Section 9, and in Sections 11 and 13 of the respective Test Method (1000.0 and 1002.0) of Short-term Methods of Estimating the Chronic Toxicity of Effluent and Receiving Water to Freshwater Organisms (EPA 821-R-02-013), Fourth Edition, October 2002 or most recent update.

b. Types of Bioassay Tests

The permittee shall conduct a 7-day Cladoceran (*Ceriodaphnia dubia*) Survival and Reproduction Test and a 7-day Fathead Minnow (*Pimephales promelas*) Larval Survival and Growth Test on samples of the final effluent. All tests will be conducted on 24-hour composite samples of final effluent. All test solutions shall be renewed daily. On days three and five fresh 24-hour composite samples of the effluent collected on alternate days shall be used to renew the test solutions.

If in any control more than 10% of the test organisms die in 96 hours, or more than 20% of the test organisms die in 7 days, that test shall be repeated. In addition, if in the *Ceriodaphnia* test control the number of newborns produced per surviving female is less than 15, or if 60% of surviving control females have less than three broods; and in the fathead minnow test if the mean dry weight of surviving fish in the control group is less than 0.25 mg, that test shall also be repeated. Such testing will determine whether the effluent affects the survival, reproduction, and/or growth of the test organisms. Results of all tests regardless of completion must be reported to IDEM.

c. Effluent Sample Collection and Chemical Analysis

- (1) Samples for the purposes of Whole Effluent Toxicity Testing will be taken at a point that is representative of the discharge, but prior to discharge. The maximum holding time for whole effluent is 36 hours for a 24 hour composite sample. Bioassay tests must be started within 36 hours after termination of the 24 hour composite sample collection. Bioassay of effluent sampling may be coordinated with other permit sampling requirements as appropriate to avoid duplication.
- (2) Chemical analysis must accompany each effluent sample taken for bioassay test. The analysis detailed under Part I.A. should be conducted for the effluent sample. Chemical analysis must comply with approved EPA test methods.

d. Frequency and Duration

The toxicity tests specified in paragraph b. shall be conducted <u>once every six months</u> for the duration of the permit. The results of the toxicity tests are due within each six month period as calculated from the effective date of the permit.

If toxicity is demonstrated as defined under paragraph f (1), (2) or (3), the permittee is required to conduct a toxicity reduction evaluation (TRE) as specified in Section 2.

e. Reporting

- (1) Results shall be reported according to EPA 821-R-02-013, Section 10 (Report Preparation). Two copies of the completed report for each test shall be submitted to the Compliance Data Section of the IDEM no later than sixty days after completion of the test.
- (2) For quality control, the report shall include the results of appropriate standard reference toxic pollutant tests for chronic endpoints and historical reference toxic pollutant data with mean values and appropriate ranges for the respective test species *Ceriodaphnia dubia* and *Pimephales promelas*. Biomonitoring reports must also include copies of Chain-of-Custody Records and Laboratory raw data sheets.
- (3) Statistical procedures used to analyze and interpret toxicity data including critical values of significance used to evaluate each point of toxicity should be described and included as part of the biomonitoring report.

f. Demonstration of Toxicity

(1) Acute toxicity will be demonstrated if the effluent is observed to have exceeded 1.0 TU_a(acute toxic units) based on 100% effluent for the test organism in 48 and 96 hours for *Ceriodaphnia dubia* or *Pimephales promelas*, which ever is more sensitive.

- (2) Chronic toxicity will be demonstrated if the effluent is observed to have exceeded **2.2** TU_c (chronic toxic units) for *Ceriodaphnia dubia* or *Pimephales promelas* .
- (3) If toxicity is found in any of the tests specified above, a confirmation toxicity test using the specified methodology and same test species shall be conducted within two weeks of receiving the chronic toxicity test results. If any two (2) consecutive tests, including any and all confirmation tests, indicate the presence of toxicity, the permittee must begin the implementation of a Toxicity Reduction Evaluation (TRE) as described below. The whole effluent toxicity tests required above may be suspended (upon approval from IDEM) while the TRE is being conducted.

g. Definitions

- (1)TU_c is defined as 100/NOEC or 100/IC₂₅.
- (2)TU_a is defined as 100/LC₅₀ where the LC₅₀ is expressed as a percent effluent in the test medium of an acute Whole Effluent Toxicity (WET) test that is statistically or graphically estimated to be lethal to fifty percent (50%) of the test organisms.
- (3) "Inhibition concentration 25" or "IC₂₅" means the toxicant (effluent) concentration that would cause a twenty-five percent (25%) reduction in a nonquantal biological measurement for the test population. For example, the IC₂₅ is the concentration of toxicant (effluent) that would cause a twenty-five percent (25%) reduction in mean young per female or in growth for the test population.
- (4) "No observed effect concentration" or "NOEC" is the highest concentration of toxicant (effluent) to which organisms are exposed in a full life cycle or partial life cycle (short term) test, that causes no observable adverse effects on the test organisms, that is, the highest concentration of toxicant in which the values for the observed responses are not statistically significantly different from the controls.

2. Toxicity Reduction Evaluation (TRE) Schedule of Compliance

The development and implementation of a TRE (including any post-TRE biomonitoring requirements) is only required if toxicity is demonstrated as defined by Paragraph 1.f.

<u>Milestone Dates</u>: see sections a through e following for additional information on the TRE milestone dates.

Development of TRE Plan	Within 90 days of two failed toxicity tests.
Initiate Effluent TRE	Within 30 days of TRE Plan approval by
	IDEM.
Progress Reports	Every 90 days from the initiation date of
	the TRE.
Submit Final TRE Results	Within 90 days of the completion of the
	TRE, not to exceed 3 years from the date of
	the initial determination of toxicity (two
	failed toxicity tests).
Post-TRE Biomonitoring	Immediately upon completion of the TRE,
Requirements	conduct 3 consecutive months of toxicity
	tests, if no toxicity is shown, reduce
	toxicity tests to once every 6 months for
	the duration of the permit term. If post –
	TRE biomonitoring demonstrates toxicity,
	revert to implementation of a TRE.

a. Development of TRE Plan

Within 90 days of determination of toxicity, the permittee shall submit plans for an effluent TRE to the Compliance Data Section of the IDEM. The TRE plan shall include appropriate measures to characterize the causative toxicant and the variability associated with these compounds. Guidance on conducting effluent toxicity reduction evaluations is available from EPA and from the EPA publications listed below:

(1) Methods for Aquatic Toxicity Identification Evaluations:

Phase I Toxicity Characterization Procedures, Second Edition (EPA/600/6-91/003), February 1991.

Phase II Toxicity Identification Procedures (EPA 600/R-92/080), September 1993.

Phase III Toxicity Confirmation Procedures (EPA/600/R-92/081), September 1993.

(2) Methods for Chronic Toxicity Identification Evaluations

Phase I Characterization of Chronically Toxic Effluents EPA/600/6-91/005F, May 1992.

- (3) Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (EPA/600/2-88/070), April 1989.
- (4) Toxicity Reduction Evaluation Protocol for Municipal Wastewater Treatment Plants (EPA/833-B-99-022), August 1999

b. Conduct the TRE

Within 30 days after approval of the TRE plan by IDEM, the permittee must initiate an effluent TRE consistent with the TRE plan. Progress reports shall be submitted every 90 days to the Compliance Data Section of the Office of Water Quality (OWQ) beginning 90 days after initiation of the TRE study.

c. Reporting

Within 90 days of the TRE study completion, the permittee shall submit to the Compliance Data Section of the Office of Water Quality (OWQ) the final study results and a schedule for reducing the toxicity to acceptable levels through control of the toxicant source or treatment of whole effluent.

d. Compliance Date

The permittee shall complete items a, b, and c from Section 2 and reduce the toxicity to acceptable levels as soon as possible but no later than three years after the date of determination of toxicity.

e. Post-TRE Biomonitoring Requirements (Only Required After Completion of a TRE)

After the TRE, the permittee shall conduct monthly toxicity tests with 2 or more species for a period of three months. Should three consecutive monthly tests demonstrate no toxicity, the permittee shall conduct chronic tests every six months for the duration of the permit. These tests shall be conducted in accordance with the procedures under the Whole Effluent Toxicity Tests Section. The results of these tests shall be submitted to the Compliance Data Section of the Office of Water Quality (OWQ).

If toxicity is demonstrated as defined in paragraph 1.f after the initial three month period, testing must revert to a TRE as in Part 2 (TRE).

PART II

STANDARD CONDITIONS FOR NPDES PERMITS

A. GENERAL CONDITIONS

1. <u>Duty to Comply</u>

The permittee shall comply with all terms and conditions of this permit in accordance with 327 IAC 5-2-8(1) and all other requirements of 327 IAC 5-2-8. Any permit noncompliance constitutes a violation of the Clean Water Act and IC 13 and is grounds for enforcement action or permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

2. Duty to Mitigate

In accordance with 327 IAC 5-2-8(3), the permittee shall take all reasonable steps to minimize or correct any adverse impact to the environment resulting from noncompliance with this permit. During periods of noncompliance, the permittee shall conduct such accelerated or additional monitoring for the affected parameters, as appropriate or as requested by IDEM, to determine the nature and impact of the noncompliance.

3. Duty to Provide Information

The permittee shall submit any information that the permittee knows or has reason to believe would constitute cause for modification or revocation and reissuance of the permit at the earliest time such information becomes available, such as plans for physical alterations or additions to the facility that:

- a. could significantly change the nature of, or increase the quantity of, pollutants discharged; or
- b. the Commissioner may request to evaluate whether such cause exists.

In accordance with 327 IAC 5-1-3(a)(5), the permittee must also provide any information reasonably requested by the Commissioner.

4. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must obtain and submit a renewal of this permit in accordance with 327 IAC 5-3-2(a)(2). It is the permittee's responsibility to obtain and submit the application. In accordance with 327 IAC 5-2-3(c), the owner of the facility or operation from which a discharge of pollutants occurs is responsible for applying for and obtaining the NPDES permit, except where the facility or operation is operated by a person other than an employee of the owner in which case it is the operator's responsibility to apply for and obtain the permit. The application must be submitted at least 180 days before the expiration date of this permit. This deadline may be extended if:

- a. permission is requested in writing before such deadline;
- b. IDEM grants permission to submit the application after the deadline; and
- c. the application is received no later than the permit expiration date.

As required under 327 IAC 5-2-3(g)(1) and (2), POTWs with design influent flows equal to or greater than one million (1,000,000) gallons per day and POTWs with an approved pretreatment program or that are required to develop a pretreatment program, will be required to provide the results of whole effluent toxicity testing as part of their NPDES renewal application.

5. Transfers

In accordance with 327 IAC 5-2-8(4)(D), this permit is nontransferable to any person except in accordance with 327 IAC 5-2-6(c). This permit may be transferred to another person by the permittee, without modification or revocation and reissuance being required under 327 IAC 5-2-16(c)(1) or 16(e)(4), if the following occurs:

- a. the current permittee notified the Commissioner at least thirty (30) days in advance of the proposed transfer date.
- b. a written agreement containing a specific date of transfer of permit responsibility and coverage between the current permittee and the transferee (including acknowledgment that the existing permittee is liable for violations up to that date, and the transferee is liable for violations from that date on) is submitted to the Commissioner.

- c. the transferee certifies in writing to the Commissioner their intent to operate the facility without making such material and substantial alterations or additions to the facility as would significantly change the nature or quantities of pollutants discharged and thus constitute cause for permit modification under 327 IAC 5-2-16(d). However, the Commissioner may allow a temporary transfer of the permit without permit modification for good cause, e.g., to enable the transferee to purge and empty the facility's treatment system prior to making alterations, despite the transferee's intent to make such material and substantial alterations or additions to the facility.
- d. the Commissioner, within thirty (30) days, does not notify the current permittee and the transferee of the intent to modify, revoke and reissue, or terminate the permit and to require that a new application be filed rather than agreeing to the transfer of the permit.

The Commissioner may require modification or revocation and reissuance of the permit to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act or state law.

6. Permit Actions

In accordance with 327 IAC 5-2-16(b) and 327 IAC 5-2-8(4), this permit may be modified, revoked and reissued, or terminated for cause, including, but not limited to, the following:

- a. Violation of any terms or conditions of this permit;
- b. Failure of the permittee to disclose fully all relevant facts or misrepresentation of any relevant facts in the application, or during the permit issuance process; or
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge controlled by the permittee (e.g., plant closure, termination of the discharge by connecting to a POTW, a change in state law or information indicating the discharge poses a substantial threat to human health or welfare).

Filing of either of the following items does not stay or suspend any permit condition: (1) a request by the permittee for a permit modification, revocation and reissuance, or termination, or (2) submittal of information specified in Part II.A.3 of the permit including planned changes or anticipated noncompliance.

The permittee shall submit any information that the permittee knows or has reason to believe would constitute cause for modification or revocation and reissuance of the permit at the earliest time such information becomes available, such as plans for physical alterations or additions to the permitted facility that:

- 1. could significantly change the nature of, or increase the quantity of, pollutants discharged; or
- 2. the commissioner may request to evaluate whether such cause exists.

7. Property Rights

Pursuant to 327 IAC 5-2-8(6) and 327 IAC 5-2-5(b), the issuance of this permit does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to persons or private property or an invasion of rights, any infringement of federal, state, or local laws or regulations. The issuance of the permit also does not preempt any duty to obtain any other state, or local assent required by law for the discharge or for the construction or operation of the facility from which a discharge is made.

8. Severability

In accordance with 327 IAC 1-1-3, the provisions of this permit are severable and, if any provision of this permit or the application of any provision of this permit to any person or circumstance is held invalid, the invalidity shall not affect any other provisions or applications of the permit which can be given effect without the invalid provision or application.

9. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under Section 311 of the Clean Water Act.

10. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Clean Water Act or state law.

11. Penalties for Violation of Permit Conditions

Pursuant to IC 13-30-4, a person who violates any provision of this permit, the water pollution control laws; environmental management laws; or a rule or standard adopted by the Water Pollution Control Board is liable for a civil penalty not to exceed twenty-five thousand dollars (\$25,000) per day of any violation. Pursuant to IC 13-30-5, a person who obstructs, delays, resists, prevents, or interferes with (1) the department; or (2) the department's personnel or designated agent in the performance of an inspection or investigation commits a class C infraction.

Pursuant to IC 13-30-10, a person who intentionally, knowingly, or recklessly violates any provision of this permit, the water pollution control laws or a rule or standard adopted by the Water Pollution Control Board commits a class D felony punishable by the term of imprisonment established under IC 35-50-2-7(a) (up to one year), and/or by a fine of not less than five thousand dollars (\$5,000) and not more than fifty thousand dollars (\$50,000) per day of violation. A person convicted for a violation committed after a first conviction of such person under this provision is subject to a fine of not more than one hundred thousand dollars (\$100,000) per day of violation, or by imprisonment for not more than two (2) years, or both.

12. Penalties for Tampering or Falsification

In accordance with 327 IAC 5-2-8(9), the permittee shall comply with monitoring, recording, and reporting requirements of this permit. The Clean Water Act, as well as IC 13-30-10, provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under a permit shall, upon conviction, be punished by a fine of not more than ten thousand dollars (\$10,000) per violation, or by imprisonment for not more than one hundred eighty (180) days per violation, or by both.

13. Toxic Pollutants

If any applicable effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Clean Water Act for a toxic pollutant injurious to human health, and that standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition in accordance with 327 IAC 5-2-8(5). Effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants injurious to human health are effective and must be complied with, if applicable to the permittee, within the time provided in the implementing regulations, even absent permit modification.

14. Operator Certification

The permittee shall have the wastewater treatment facilities under the responsible charge of an operator certified by the Commissioner in a classification corresponding to the classification of the wastewater treatment plant as required by IC 13-18-11-11 and 327 IAC 5-22. In order to operate a wastewater treatment plant the operator shall have qualifications as established in 327 IAC 5-22-7. The permittee shall designate one (1) person as the certified operator with complete responsibility for the proper operations of the wastewater facility.

327 IAC 5-22-10.5(a) provides that a certified operator may be designated as being in responsible charge of more than one (1) wastewater treatment plant, if it can be shown that he will give adequate supervision to all units involved. Adequate supervision means that sufficient time is spent at the plant on a regular basis to assure that the certified operator is knowledgeable of the actual operations and that test reports and results are representative of the actual operations conditions. In accordance with 327 IAC 5-22-3(11), "responsible charge" means the person responsible for the overall daily operation, supervision, or management of a wastewater facility.

Pursuant to 327 IAC 5-22-10(4), the permittee shall notify IDEM when there is a change of the person serving as the certified operator in responsible charge of the wastewater treatment facility. The notification shall be made no later than thirty (30) days after a change in the operator.

15. <u>Construction Permit</u>

Except in accordance with 327 IAC 3, the permittee shall not construct, install, or modify any water pollution treatment/control facility as defined in 327 IAC 3-1-2(24). Upon completion of any construction, the permittee must notify the Compliance Data Section of the Office of Water Quality in writing.

16. <u>Inspection and Entry</u>

In accordance with 327 IAC 5-2-8(7), the permittee shall allow the Commissioner, or an authorized representative, (including an authorized contractor acting as a representative of the Commissioner) upon the presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the permittee's premises where a point source, regulated facility, or activity is located or conducted, or where records must be kept pursuant to the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment or methods (including monitoring and control equipment), practices, or operations regulated or required pursuant to this permit; and
- d. Sample or monitor at reasonable times, any discharge of pollutants or internal wastestreams for the purposes of evaluating compliance with the permit or as otherwise authorized.

17. New or Increased Discharge of Pollutants

- a. New or increased discharges of pollutants must comply with 327 IAC 5-2-11.3. The permittee is prohibited from undertaking any deliberate action that would result in a new or increased discharge of a Bioaccumulative Chemical of Concern (BCC) or a new or increased permit limit for a pollutant or pollutant parameter that is not a BCC, unless one (1) of the following is completed prior to the commencement of the action:
 - (1) Information is submitted to the Commissioner demonstrating that the proposed new or increased discharge will not cause a significant lowering of water quality as defined under 327 IAC 5-2-11.3(b)(1). Upon review of this information, the Commissioner may request additional information or may determine that the proposed increase is a significant lowering of water quality and require the submittal of an antidegradation demonstration.
 - (2) An antidegradation demonstration is submitted and approved in accordance with 327 IAC 5-2-11.3(b)(3) through (6).
- b. The permittee is prohibited from allowing a new or increased discharge of a BCC from:
 - (1) an existing industrial user proposing to increase or add a process wastestream; or
 - (2) a proposed new industrial user that will have a process wastestream;
 - where the process wastestream contains a BCC at concentrations detectable using the most sensitive analytical method for the BCC contained in 40 CFR 136 or approved by the Commissioner, except as provided under subsection (c):
- c. A new or increased discharge of a BCC from an existing or proposed industrial user is not prohibited under subsection (b) if one (1) of the following is completed prior to commencement of the discharge:
 - (1) Information is submitted to the Commissioner demonstrating that the proposed new or increased discharge will not cause a significant lowering of water quality as defined under 327 IAC 5-2-11.3(b)(1). Upon review of this information, the Commissioner may request additional information or may determine that the proposed increase is a significant lowering of water quality and require the submittal of an antidegradation demonstration.
 - (2) An antidegradation demonstration is submitted and approved in accordance with 327 IAC 5-2-11.3(b)(3) through (6).

- d. The permittee shall monitor for any BCC known or believed to be present in the discharge, whether or not the permit contains a limit for that pollutant. If there is an increase in the loading of a BCC, above normal variability and attributable to a deliberate action, the permittee shall notify the Commissioner of the increase unless either:
 - (1) the permittee has submitted the information required under 327 IAC 5-2-11.3(b)(2)(A)(i) for the increase; or
 - (2) an antidegradation demonstration for the increase has been approved under 327 IAC 5-2-11.3(b)(5).

If the increase is determined to be a significant lowering of water quality, as defined under 327 IAC 5-2-11.3(b)(1), the Commissioner shall require reduction or elimination of the increase.

e. If the permittee seeks to significantly lower water quality in a high quality water for any pollutant or pollutant parameter, the permittee must first submit an antidegradation demonstration for consideration and approval by the Commissioner, in accordance with 327 IAC 5-2-11.3(b).

B. MANAGEMENT REQUIREMENTS

- 1. Facility Operation, Maintenance and Quality Control
 - a. In accordance with 327 IAC 5-2-8(8), the permittee shall at all times maintain in good working order and efficiently operate all facilities and systems (and related appurtenances) for collection and treatment that are:
 - (1) installed or used by the permittee; and
 - (2) necessary for achieving compliance with the terms and conditions of the permit.

Neither 327 IAC 5-2-8(8), nor this provision, shall be construed to require the operation of installed treatment facilities that are unnecessary for achieving compliance with the terms and conditions of the permit. Taking redundant treatment units off line does not violate the bypass provisions of the permit, provided that the permittee is at all times: maintaining in good working order and efficiently operating all facilities and systems; providing best quality effluent; and achieving compliance with the terms and conditions of the permit.

b. The permittee shall operate the permitted facility in a manner which will minimize upsets and discharges of excessive pollutants. The permittee shall properly remove and dispose of excessive solids and sludges.

- c. The permittee shall provide an adequate operating staff which is duly qualified to carry out the operation, maintenance, and testing functions required to ensure compliance with the conditions of this permit.
- d. Maintenance of all waste collection, control, treatment, and disposal facilities shall be conducted in a manner that complies with the bypass provisions set forth below.
- e. Any extensions to the sewer system must continue to be constructed on a separated basis. Plans and specifications, when required, for extension of the sanitary system must be submitted to the Facility Construction Section, Office of Water Quality in accordance with 327 IAC 3-2-1. There shall also be an ongoing preventative maintenance program for the sanitary sewer system.

2. Bypass of Treatment Facilities

Pursuant to 327 IAC 5-2-8(11):

- a. Terms as defined in 327 IAC 5-2-8(11)(A):
 - (1) "Bypass" means the intentional diversion of a waste stream from any portion of a treatment facility.
 - (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- b. Bypasses, as defined above, are prohibited, and the Commissioner may take enforcement action against a permittee for bypass, unless:
 - (1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage, as defined above;
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The permittee submitted notices as required under Part II.B.2.d; or
 - (4) The condition under Part II.B.2.f below is met.

- c. Bypasses that result in death or acute injury or illness to animals or humans must be reported in accordance with the "Spill Response and Reporting Requirements" in 327 IAC 2-6.1, including calling 888/233-7745 as soon as possible, but within two (2) hours of discovery. However, under 327 IAC 2-6.1-3(1), when the constituents of the bypass are regulated by this permit, and death or acute injury or illness to animals or humans does not occur, the reporting requirements of 327 IAC 2-6.1 do not apply.
- d. The permittee must provide the Commissioner with the following notice:
 - (1) If the permittee knows or should have known in advance of the need for a bypass (anticipated bypass), it shall submit prior written notice. If possible, such notice shall be provided at least ten (10) days before the date of the bypass for approval by the Commissioner.
 - (2) The permittee shall orally report or fax a report of an unanticipated bypass within 24 hours of becoming aware of the bypass event. The permittee must also provide a written report within five (5) days of the time the permittee becomes aware of the bypass event. The written report must contain a description of the noncompliance (i.e. the bypass) and its cause; the period of noncompliance, including exact dates and times; if the cause of noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent recurrence of the bypass event.
- e. The Commissioner may approve an anticipated bypass, after considering its adverse effects, if the Commissioner determines that it will meet the conditions listed above in Part II.B.2.b. The Commissioner may impose any conditions determined to be necessary to minimize any adverse effects.
- f. The permittee may allow any bypass to occur that does not cause a violation of the effluent limitations in the permit, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Part II.B.2.b.,d and e of this permit.

3. Upset Conditions

Pursuant to 327 IAC 5-2-8(12):

- a. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- b. An upset shall constitute an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Paragraph c of this subsection, are met.

- c. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, that:
 - (1) An upset occurred and the permittee has identified the specific cause(s) of the upset;
 - (2) The permitted facility was at the time being operated in compliance with proper operation and maintenance procedures;
 - (3) The permittee complied with any remedial measures required under "Duty to Mitigate", Part II.A.2; and
 - (4) The permittee submitted notice of the upset as required in the "Incident Reporting Requirements," Part II.C.3, or 327 IAC 2-6.1, whichever is applicable. However, under 327 IAC 2-6.1-3(1), when the constituents of the discharge are regulated by this permit, and death or acute injury or illness to animals or humans does not occur, the reporting requirements of 327 IAC 2-6.1 do not apply.
- d. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof pursuant to 40 CFR 122.41(n)(4).

4. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed from or resulting from treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the State and to be in compliance with all Indiana statutes and regulations relative to liquid and/or solid waste disposal.

- a. Collected screenings, slurries, sludges, and other such pollutants shall be disposed of in accordance with provisions set forth in 329 IAC 10, 327 IAC 6.1, or another method approved by the Commissioner.
- b. The permittee shall comply with existing federal regulations governing solids disposal, and with applicable provisions of 40 CFR Part 503, the federal sludge disposal regulation standards.
- c. The permittee shall notify the Commissioner prior to any changes in sludge use or disposal practices.
- d. The permittee shall maintain records to demonstrate its compliance with the above disposal requirements.

5. Power Failures

In accordance with 327 IAC 5-2-10 and 327 IAC 5-2-8(13) in order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

- a. provide an alternative power source sufficient to operate facilities utilized by the permittee to maintain compliance with the effluent limitations and conditions of this permit, or
- b. shall halt, reduce or otherwise control all discharge in order to maintain compliance with the effluent limitations and conditions of this permit upon the reduction, loss, or failure of one or more of the primary sources of power to facilities utilized by the permittee to maintain compliance with the effluent limitations and conditions of this permit.

6. Unauthorized Discharge

Any overflow or release of sanitary wastewater from the wastewater treatment facilities or collection system that results in a discharge to waters of the state and is not specifically authorized by this permit is expressly prohibited. These discharges are subject to the reporting requirements in Part II.C.3 of this permit.

C. REPORTING REQUIREMENTS

1. Planned Changes in Facility or Discharge

Pursuant to 327 IAC 5-2-8(10)(F) and 5-2-16(d), the permittee shall give notice to the Commissioner as soon as possible of any planned alterations or additions to the facility (which includes any point source) that could significantly change the nature of, or increase the quantity of, pollutants discharged. Following such notice, the permit may be modified to revise existing pollutant limitations and/or to specify and limit any pollutants not previously limited. Material and substantial alterations or additions to the permittee's operation that were not covered in the permit (e.g., production changes, relocation or combination of discharge points, changes in the nature or mix of products produced) are also cause for modification of the permit. However those alterations which constitute total replacement of the process or the production equipment causing the discharge converts it into a new source, which requires the submittal of a new NPDES application.

2. Monitoring Reports

Pursuant to 327 IAC 5-2-8(9), 327 IAC 5-2-13, and 327 IAC 5-2-15, monitoring results shall be reported at the intervals and in the form specified in "Data On Plant Operation", Part I.B.2.

3. Incident Reporting Requirements

Pursuant to 327 IAC 5-2-8(10) and 327 IAC 5-1-3, the permittee shall orally report to the Commissioner information on the following incidents within 24 hours from the time permittee becomes aware of such occurrence. If the incident meets the emergency criteria of item b (Part II.C.3.b) or 327 IAC 2-6.1, then the report shall be made as soon as possible, but within two (2) hours of discovery. However, under 327 IAC 2-6.1-3(1), when the constituents of the discharge are regulated by this permit, and death or acute injury or illness to animals or humans does not occur, the reporting requirements of 327 IAC 2-6.1 do not apply.

- a. Any unanticipated bypass which exceeds any effluent limitation in the permit;
- b. Any emergency incident which may pose a significant danger to human health or the environment. Reports under this item shall be made as soon as the permittee becomes aware of the incident by calling 317/233-7745 (888/233-7745 toll free in Indiana). This number should only be called when reporting these emergency events;
- c. Any upset (as defined in Part II.B.3 above) that exceeds any technology-based effluent limitations in the permit;
- d. Any release, including basement backups, from the sanitary sewer system (including satellite sewer systems operated or maintained by the permittee) not specifically authorized by this permit. Reporting of known releases from private laterals not caused by a problem in the sewer system owned or operated by the permittee is not required under Part II.C.3, however, documentation of such events must be maintained by the permittee and available for review by IDEM staff.
- e. Any unauthorized discharge from a combined sewer overflow outfall which is identified in this permit; or
- f. Violation of a maximum daily discharge limitation for any of the following toxic pollutants: mercury and zinc.

The permittee can make the oral reports by calling 317/232-8670 during regular business hours. A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. For incidents involving effluent limit violations or discharges, the written submission shall contain: a description of the event and its cause; the period of occurrence, including exact dates and times, and, if the event has not concluded, the anticipated time it is expected to continue; and steps taken or planned to reduce, mitigate and eliminate the event and steps taken or planned to prevent its recurrence. For sewer releases which do not meet the definition of a discharge, the written submission shall contain: a description of the event and its believed cause; the period of occurrence; and any steps taken or planned to mitigate the event and steps taken or planned to prevent its recurrence.

The permittee may submit a "Bypass Overflow/Incident Report" or a "Noncompliance Notification Report", whichever is applicable, to IDEM at 317/232-8637 or 317/232-8406 or to www.eports@idem.IN.gov. If a complete fax or email submittal is sent within 24 hours of the time that the permittee became aware of the occurrence, then that report will satisfy both the oral and written reporting requirements.

4. Other Noncompliance

Pursuant to 327 IAC 5-2-8(10)(D), the permittee shall report any instance of noncompliance not reported under the "Incident Reporting Requirements" in Part II.C.3 at the time the pertinent Discharge Monitoring Report is submitted. The written submission shall contain: a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent the noncompliance.

5. Other Information

Pursuant to 327 IAC 5-2-8(10)(E), where the permittee becomes aware that it failed to submit any relevant facts or submitted incorrect information in a permit application or in any report to the Commissioner, the permittee shall promptly submit such facts or corrected information to the Commissioner.

6. Signatory Requirements

Pursuant to 327 IAC 5-2-22 and 327 IAC 5-2-8(14):

- a. All reports required by the permit and other information requested by the Commissioner shall be signed and certified by a person described below or by a duly authorized representative of that person:
 - (1) For a corporation: by a principal executive defined as a president, secretary, treasurer, any vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making functions for the corporation or the manager of one or more manufacturing, production, or operating facilities employing more than two hundred fifty (250) persons or having gross annual sales or expenditures exceeding twenty-five million dollars (\$25,000,000) (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

- (3) For a federal, state, or local governmental body or any agency or political subdivision thereof: by either a principal executive officer or ranking elected official.
- b. A person is a duly authorized representative only if:
 - (1) The authorization is made in writing by a person described above.
 - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
 - (3) The authorization is submitted to the Commissioner.
- c. <u>Certification</u>. Any person signing a document identified under paragraphs a and b of this section, shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

7. Availability of Reports

Except for data determined to be confidential under 327 IAC 12.1, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Indiana Department of Environmental Management and the Regional Administrator. As required by the Clean Water Act, permit applications, permits, and effluent data shall not be considered confidential.

8. Penalties for Falsification of Reports

IC 13-30 and 327 IAC 5-2-8(14) provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 180 days per violation, or by both.

9. Progress Reports

In accordance with 327 IAC 5-2-8(10)(A), reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.

10. Advance Notice for Planned Changes

In accordance with 327 IAC 5-2-8(10)(B), the permittee shall give advance notice to IDEM of any planned changes in the permitted facility, any activity, or other circumstances that the permittee has reason to believe may result in noncompliance with permit requirements.

11. <u>Additional Requirements for POTWs and/or Treatment Works Treating Domestic Sewage</u>

- a. All POTWs shall identify, in terms of character and volume of pollutants, any significant indirect discharges into the POTW which are subject to pretreatment standards under section 307(b) and 307 (c) of the CWA.
- b. All POTWs must provide adequate notice to the Commissioner of the following:
 - (1) Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to section 301 or 306 of the CWA if it were directly discharging those pollutants.
 - (2) Any substantial change in the volume or character of pollutants being introduced into that POTW by any source where such change would render the source subject to pretreatment standards under section 307(b) or 307(c) of the CWA or would result in a modified application of such standards.

As used in this clause, "adequate notice" includes information on the quality and quantity of effluent introduced into the POTW, and any anticipated impact of the change on the quantity or quality of the effluent to be discharged from the POTW.

- c. This permit incorporates any conditions imposed in grants made by the U.S. EPA and/or IDEM to a POTW pursuant to Sections 201 and 204 of the Clean Water Act, that are reasonably necessary for the achievement of effluent limitations required by Section 301 of the Clean Water Act.
- d. This permit incorporates any requirements of Section 405 of the Clean Water Act governing the disposal of sewage sludge from POTWs or any other treatment works treating domestic sewage for any use for which rules have been established in accordance with any applicable rules.

e. POTWs must develop and submit to the Commissioner a POTW pretreatment program when required by 40 CFR 403 and 327 IAC 5-19-1, in order to assure compliance by industrial users of the POTW with applicable pretreatment standards established under Sections 307(b) and 307(c) of the Clean Water Act. The pretreatment program shall meet the criteria of 327 IAC 5-19-3 and, once approved, shall be incorporated into the POTW's NPDES permit.

D. ADDRESSES

1. Cashiers Office

Indiana Department of Environmental Management Cashiers Office – Mail Code 50-10C 100 N. Senate Avenue Indianapolis, Indiana 46204-2251

The following correspondence shall be sent to the Cashiers Office:

- a. NPDES permit applications (new, renewal or modifications) with fee
- b. Construction permit applications with fee

2. Municipal NPDES Permits Section

Indiana Department of Environmental Management Office of Water Quality – Mail Code 65-42 Municipal NPDES Permits Section 100 N. Senate Avenue Indianapolis, Indiana 46204-2251

The following correspondence shall be sent to the Municipal NPDES Permits Section:

- a. Preliminary Effluent Limits request letters
- b. Comment letters pertaining to draft NPDES permits
- c. NPDES permit transfer of ownership requests
- d. NPDES permit termination requests
- e. Notifications of substantial changes to a treatment facility, including new industrial sources
- f. Combined Sewer Overflow (CSO) Operational Plans

- g. CSO Long Term Control Plans (LTCP)
- h. Stream Reach Characterization and Evaluation Reports (SRCER)

3. Compliance Data Section

Indiana Department of Environmental Management Office of Water Quality – Mail Code 65-42 Compliance Data Section 100 N. Senate Avenue Indianapolis, Indiana 46204-2251

The following correspondence shall be sent to the Compliance Data Section:

- a. Discharge Monitoring Reports (DMRs)
- b. Monthly Reports of Operation (MROs)
- c. Monthly Monitoring Reports (MMRs)
- d. 'CSO DMRs
- e. Gauging station and flow meter calibration documentation
- f. Compliance schedule progress reports
- g. Completion of Construction notifications
- h. Whole Effluent Toxicity Testing reports
- i. Toxicity Reduction Evaluation (TRE) plans and progress reports

4. Pretreatment Group

Indiana Department of Environmental Management Office of Water Quality – Mail Code 65-42 Compliance Data Section – Pretreatment Group 100 N. Senate Avenue Indianapolis, Indiana 46204-2251

The following correspondence shall be sent to the Pretreatment Group:

- a. Organic Pollutant Monitoring Reports
- b. Significant Industrial User (SIU) Quarterly Noncompliance Reports
- c. Pretreatment Program Annual Reports

- d. Sewer Use Ordinances
- e. Enforcement Response Plans (ERP)
- f. Sludge analytical results

5. Enforcement Section

Indiana Department of Environmental Management Office of Water Quality – Mail Code 65-40 Enforcement Section 100 N. Senate Avenue Indianapolis, Indiana 46204-2251

- a. Bypass/Overflow Reports
- b. Anticipated Bypass/Overflow Reports

PART III

REQUIREMENT TO OPERATE A PRETREATMENT PROGRAM

A. CONDITIONS

The permittee, hereinafter referred to as the "Control Authority," is required to operate its approved industrial pretreatment program approved on July 7, 1986, and any subsequent modifications approved up to the issuance of this permit. To ensure the program is operated as approved and consistent with 327 IAC 5-16 through 5-21, the following conditions and reporting requirements are hereby established. The Control Authority (CA) shall:

1. Legal Authority

The CA shall develop, enforce and maintain adequate legal authority in its Sewer Use Ordinance (SUO) to fully implement the pretreatment program in compliance with State and local law. As part of this requirement, the CA shall develop and maintain local limits as necessary to implement the prohibitions and standards in 327 IAC 5-18.

2. Permit Issuance

In accordance with 327 IAC 5-19-3(1) the CA is required to issue/reissue permits to Significant Industrial User(s) (SIU) as stated in the SUO. The CA must issue permits to new SIUs prior to the commencement of discharge. A SIU is defined in the SUO.

3. Industrial Compliance Monitoring

The CA is required to conduct inspection, surveillance, and monitoring activities to determine SIU compliance status with the approved program and the SUO independent of data supplied by the SIU. SIU compliance monitoring performed by the CA will be conducted in accordance with the program plan or yearly program plan. SIUs will be inspected once per year, at a minimum.

4. Enforcement

The CA is required to initiate the appropriate enforcement action against a SIU violating any provision of the SUO and/or discharge permit in accordance with the Enforcement Response Procedures (ERP) adopted by the CA. The CA must investigate violations by collecting and analyzing samples and collecting other information with sufficient care to produce evidence admissible in enforcement proceedings or in judicial actions in accordance with 40 CFR 403.8(f)(1)(iii) and 327 IAC 5-19-3(1)(F).

5. SIU Quarterly Noncompliance Report

The CA is required to report the compliance status of each SIU quarterly. The report is due by the 28th of the following months: April, July, October, and January of each year. The report shall include a description of corrective actions that have or will be taken by the CA and SIU to resolve the noncompliance situations. This report is to be sent to the Compliance Branch of the Office of Water Quality.

6. Public Participation and Annual Publishing of SIUs in Significant Noncompliance

The CA is required to comply with the public participation requirements under 40 CFR 25 and 327 IAC 5-19-3(2)(L). The CA must publish annually, by January 28, in the largest daily newspaper in the area, a list of SIUs that have been in Significant Noncompliance (SNC) with the SUO during the calendar year. The CA shall include in the ANNUAL REPORT a list of the SIUs published along with the newspaper clipping.

7. Annual Report

The CA is required to submit an annual report to the Pretreatment Group and EPA Region 5 by April 1, of each year. The annual report will be submitted in accordance with 40 CFR 403 to the following addresses:

Pretreatment Program Manager U.S. EPA Region 5, WN-16J NPDES Programs Branch 77 W. Jackson Blvd. Chicago, IL 60604

Indiana Department of Environmental Management Office of Water Quality - Mail Code 65-42 Compliance Data Section – Pretreatment Group 100 North Senate Avenue Indianapolis, IN 46204-2251

8. Records Retention

Pursuant to 327 IAC 5-16-5.3(b), the CA shall retain any pretreatment reports from an industrial user a minimum of three (3) years and shall make such reports available for inspection and copying by IDEM or the U.S. EPA. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the industrial user, the operation of the POTW pretreatment program or when requested by IDEM or the U.S. EPA.

9. Confidentiality

The CA is required to comply with all confidentiality requirements set forth in 40 CFR 403.14, as well as the procedures established in the SUO.

10. Program Resources

Pursuant to 327 IAC 5-19-3(3), The CA shall maintain sufficient resources and qualified personnel to carry out the pretreatment program requirements.

11. <u>Interjurisdictional Agreements</u>

The CA must maintain sufficient legal authority to ensure compliance with all applicable pretreatment limits and requirements by all SIUs discharging to the POTW, including SIUs within governmental jurisdictions outside the immediate jurisdiction of the POTW. The CA must maintain the interjurisdictional agreements necessary to ensure full compliance by SIUs located within other jurisdictions as discussed in 40 CFR 403.8(f)(1).

12. POTW Pretreatment Program Revision Requirements

No later than 6 months after the effective date of this permit, the permittee shall submit to EPA Region 5 and IDEM pretreatment group, a program modification request to incorporate the pretreatment streamlining revisions in 327 IAC 5-16 through 327 IAC 5-21 of Indiana Administrative Code, which became effective on May 3, 2009. The modification request shall highlight all changes to the approved program, the sewer use ordinance (SUO) and the Enforcement Response Plan (ERP) necessary to incorporate the revisions of 327 IAC 5-16 through 327 IAC 5-21 of Indiana Administrative Code required to be implemented by all delegated pretreatment programs. Any of the optional changes must be included with this submission. The required changes are described in USEPA's Pretreatment Streamlining Rule Fact Sheet 2.0: Required Changes, available at: http://cfpub.epa.gov/npdes/home.cfm?program id=3.

In addition, the program modification request must include a technical re-evaluation of the local limits in accordance with 40 CFR 122.44(j)(2)(ii). The CA is to conduct the local limitations technical evaluation consistent with U.S. EPA's Local Limits Development Guidance (July 2004) document.

13. Program Modification

Pursuant to 327 IAC 5-19-6 and 40 CFR 403.18, any significant proposed program modification shall be submitted to the Pretreatment Group and the U.S. EPA for approval. A significant modification shall include, but not be limited to, any change in the SUO, major modification in the approval program's administrative procedures, a significant reduction in monitoring procedures, a significant change in the financial/revenue system, a significant change in the local limitations contained in the SUO, and a change in the industrial survey.

NOTE: A summary of the revisions to the General Pretreatment Regulations (40 CFR 403) is available from the Pretreatment Group of the Compliance Data Section.

ATTACHMENT A

Precipitation Related Combined Sewer Overflow Discharge Authorization Requirements

I. <u>Discharge Authorization</u>

A. Combined Sewer Overflows are point sources subject to both technology-based and water quality-based requirements of the Clean Water Act and state law. The permittee is authorized to have wet weather discharges from outfalls listed below subject to the requirements and provisions of this permit, including Attachment A.

<u>Outfall</u>	Location	Receiving Water
004	15th Avenue & Elkhart Street 41°34'40" N 87°16'22" W	West Branch Little Calumet River
005	32 nd Avenue & Broadway West 41°33'39" N 87°20'11" W	West Branch Little Calumet River
006	Rhode Island Street at E. Interceptor 41°36'28" N 87°19'33" W	East Branch Grand Calumet River
007	Alley 9 at E. Interceptor 41°36'28" N 87°19'25" W	East Branch Grand Calumet River
008	Polk Street at E. Interceptor 41°36'28" N 87°21'00" W	East Branch Grand Calumet River
009	Pierce Street at E. Interceptor 41°36'25" N 87°21'09" W	East Branch Grand Calumet River
010	Bridge Street at E. Interceptor 41°36'32" N 87°22'21" W	East Branch Grand Calumet River
011	Chase Street at E. Interceptor 41°36'22" N 87°22'40" W	East Branch Grand Calumet River

012	Colfax Street at W. Interceptor 41°36'32" N 87°24'46" W	East Branch Grand Calumet River
013	25 th Avenue & Louisiana Street 41°34'23" N 87°19'08" W	West Branch Little Calumet River
014	25 th Avenue & Wisconsin Street 41°34'25" N 87°18'22" W	West Branch Little Calumet River
015	32 nd Broadway & Alley 1 East 41°33'39" N 87°20'09" W	West Branch Little Calumet River

- B. At all times the discharge from any and all CSO outfalls herein shall not cause receiving waters:
 - 1. including the mixing zone, to contain substances, materials, floating debris, oil, or scum:
 - a. that will settle to form putrescent or otherwise objectionable deposits;
 - b. that are in amounts sufficient to be unsightly or deleterious;
 - c. that produce color, visible oil sheen, odor, or other conditions in such a degree as to create a nuisance;
 - d. which are in amounts sufficient to be acutely toxic to, or otherwise severely injure or kill aquatic life, other animals, plants, or humans in accordance with 327 IAC 2-1.5-8(b)(1)(E);
 - e. which are in concentrations or combinations that will cause or contribute to the growth of aquatic plants or algae to such a degree as to create a nuisance, be unsightly, or otherwise impair the designated uses.
 - 2. outside the mixing zone, to contain substances in concentrations which on the basis of available scientific data are believed to be sufficient to injure, be chronically toxic to, or be carcinogenic, mutagenic, or teratogenic to humans, animals, aquatic life, or plants in accordance with 327 IAC 2-1.5-8(b)(2).
- C. Dry weather discharge from any portion of the POTW, including the collection system, with the exception of Outfalls 001A & 001B, is expressly **prohibited**. If any such prohibited discharge should occur, the permittee is required to report the discharge in accordance with the provisions in Part II.C.3 of this permit.

II. Monitoring and Reporting Requirements

The permittee is required to monitor the flow from each CSO outfall. This monitoring of each CSO outfall shall include:

- A. measurement of the flow volume,
- B. the time that the CSO discharge began,
- C. the flow duration, and
- D. rainfall amount.

The requirement for the measurement of flow volume may be accomplished by installing a flow measurement device or by utilizing a reliable method of estimating flow volume.

All of the information described previously in this subsection shall be reported on the CSO Discharge Monitoring Report (CSO DMR) form provided by IDEM and submitted to IDEM prior to the 28th day of the following month. All submittals under this provision shall be subject to the reporting requirements of this permit, including, but not limited to, Part II, Section C.6 ("Signatory Requirements"), C.7 ("Availability of Reports"), and C.8 ("Penalties for Falsification of Reports") of this permit.

III. CSO Operational Plan

- A. The permittee shall comply with the following minimum technology-based controls, in accordance with the federal CSO Control Policy:
 - 1. The permittee shall implement proper operation and regular maintenance programs for the sewer system and the CSOs. The purpose of the operation and maintenance programs is to reduce the magnitude, frequency and duration of CSOs. The programs shall consider regular sewer inspections; sewer, catch basin, and regulator cleaning; equipment and sewer collection system repair or replacement, where necessary; and disconnection of illegal connections.
 - 2. The permittee shall implement procedures that will maximize the use of the collection system for wastewater storage that can be accommodated by the storage capacity of the collection system in order to reduce the magnitude, frequency and duration of CSOs.
 - 3. The permittee shall review and modify, as appropriate, its existing pretreatment program to minimize CSO impacts from non-domestic users. The permittee shall identify all industrial users that discharge to the collection system upstream of any CSO outfalls; this identification shall also include the pollutants in the industrial user's wastewater and the specific CSO outfall(s) that are likely to discharge the wastewater.
 - 4. The permittee shall operate the POTW at the maximum treatable flow during all wet weather flow conditions to reduce the magnitude, frequency and duration of CSOs. The permittee shall deliver all flows to the treatment plant within the constraints of the treatment capacity of the POTW.
 - 5. Dry weather overflows from CSO outfalls are prohibited. Each dry weather overflow must be reported to IDEM as soon as the permittee becomes aware of the overflow. When the permittee detects a dry weather overflow, it shall begin corrective action immediately. The permittee shall inspect the dry weather overflow each subsequent day until the overflow has been eliminated.
 - 6. The permittee shall implement measures to control solid and floatable materials in CSO discharges.

- 7. The permittee shall implement a pollution prevention program focused on reducing the impact of CSOs on receiving waters.
- 8. The permittee shall implement a public notification process to inform citizens of when and where CSO discharges occur and their impacts. This notification must also be done in accordance with 327 IAC 5-2.1.
- 9. The permittee shall monitor to effectively characterize CSO impacts and the efficacy of CSO controls.
- B. The permittee's implementation of each of the minimum controls in Part III.A of this Attachment A shall be documented in its approved CSO Operational Plan (CSOOP). The permittee shall update the CSOOP to reflect changes in its operation or maintenance practices; measures taken to implement the above minimum requirements; and changes to the treatment plant or collection system, including changes in collection system flow characteristics, collection system or WWTP capacity or discharge characteristics (including volume, duration, frequency and pollutant concentration). At the time of permit renewal application, the permittee shall evaluate its CSOOP and update it, as necessary. No later than eighteen (18) months after permit renewal application, the permittee shall submit the CSOOP, or notify this office that no updates are necessary.

The CSOOP update(s) shall include a summary of the proposed revisions to the CSOOP as well as a reference to the page(s) that have been modified. Any CSOOP updates shall not result in:

- 1. a lower amount of flow being sent to and through the plant for treatment, or
- 2. more discharges (measured either by volume, duration, frequency, or pollutant concentration) occurring from the CSO outfalls.

The permittee shall maintain a current CSO Operational Plan, including all approved updates, on file at the POTW.

IV. Sewer Use Ordinance Review/Revision and Enforcement

The permittee's Sewer Use Ordinance must contain provisions which: (1) prohibit introduction of inflow sources to any sanitary sewer; (2) prohibit construction of new combined sewers outside of the existing combined sewer service area; and (3) provide that for any new building the inflow/clear water connection to a combined sewer shall be made separate and distinct from sanitary waste connection to facilitate disconnection of the former if a separate storm sewer subsequently becomes available. The permittee shall continuously enforce these provisions.

V. Reopening Clauses

- A. After LTCP implementation, if IDEM has evidence that a CSO discharge is causing or contributing to exceedances of water quality standards, then additional control measures, effluent limitations, and/or monitoring requirements may be imposed on the CSO through a modification of this permit, after public notice and opportunity for hearing.
- B. This permit may be reopened to address changes in the EPA National CSO Policy or state or federal law.
- C. The permit may be reopened, after public notice and opportunity for hearing, to incorporate elements of an approved LTCP.
- D. The permit may be reopened, after public notice and opportunity for hearing, to incorporate applicable provisions of IC 13-18.
- E. This permit may be reopened and modified to include the requirements of an approved LTCP or to include an approved schedule to develop and implement a LTCP in a court approved Federal Consent Decree.

ATTACHMENT B

Streamlined Mercury Variance (SMV)

I. Introduction

The permittee submitted an application for a streamlined mercury variance (SMV) in accordance with the provisions of 327 IAC 5-3.5. The SMV establishes a streamlined process for obtaining a variance from a water quality criterion used to establish a WQBEL for mercury in an NPDES permit. Based on a review of the SMV application, IDEM has determined the application to be complete as outlined in 327 IAC 5-3.5-4(e). Therefore, the SMV has been issued in accordance with 327 IAC 5-3.5-6.

II. Term of SMV

The SMV and the interim discharge limit included in Part I.A.3., Table 4 will remain in effect until the permit expires under IC 13-14-8-9. Pursuant to IC 13-14-8-9(c), when the SMV is incorporated into a permit extended under IC 13-15-3-6 (administratively extended), the SMV will remain in effect until the permit expires. The permittee may renew the SMV under the provisions of 327 IAC 5-3.5-7.

III. Annual Reports

The annual report is a condition of the Pollutant Minimization Program Plan (PMPP) requirements of 327 IAC 5-3.5-9(a)(8). The annual report must describe the permittee's progress toward fulfilling each PMPP requirement, the results of all mercury monitoring within the previous year, and the steps taken to implement the planned activities outlined under the PMPP. The annual report may also include documentation of chemical and equipment replacements, staff education programs, and other initiatives regarding mercury awareness or reductions. The complete inventory and complete evaluation required by the PMPP may be submitted as part of the annual report. Unless otherwise approved by IDEM, the annual report will be due on the anniversary of the effective date of the NPDES permit as identified on Page 1.

IV. SMV Renewal

As authorized under 327 IAC 5-3.5-7(a)(1), the permittee may apply for the renewal of an SMV at any time within 180 days prior to the expiration of the NPDES permit. In accordance with 327 IAC 5-3.5-7(c), an application for renewal of the SMV must contain the following:

- A. All information required for an initial SMV application under 327 IAC 5-3.5-4, including revisions to the PMPP, if applicable.
- B. A report on implementation of each provision of the PMPP.

- C. An analysis of the mercury concentrations determined through sampling at the facility's locations that have mercury monitoring requirements in the NPDES permit for the two (2) year period prior to the SMV renewal application.
- D. A proposed alternative mercury discharge limit, if appropriate, to be evaluated by the department according to 327 IAC 5-3.5-8(b) based on the most recent two (2) years of representative sampling information from the facility.

Renewal of the SMV is subject to a demonstration showing that PMPP implementation has achieved progress toward the goal of reducing mercury from the discharge.

V. Pollutant Minimization Program Plan (PMPP)

The PMPP is a requirement of the SMV application and is defined in 327 IAC 5-3.5-3(4) as the plan for development and implementation of Pollutant Minimization Program (PMP). The PMP is defined in 327 IAC 5-3.5-3(3) as the program developed by an SMV applicant to identify and minimize the discharge of mercury into the environment. PMPP requirements are outlined in 327 IAC 5-3.5-9. In accordance with 327 IAC 5-3.5-6, the permittee's PMPP is appended with this Attachment.

PART TWO – POLLUTANT MINIMIZATION PROGRAM PLAN (PMPP) INVENTORY/IDENTIFICATION

II A.

Appendix II A (Attachment Part II A) of this application includes the facility layout with the chemical storage locations identified (red dot) and the preliminary Inventory of Potential Uses and Sources of Mercury in all the buildings and departments, as well as preliminary identification of known mercury-bearing equipment, waste streams, and mercury storage sites.

IIB.

The GSD WWTP will implement a plan and schedule that will provide the IDEM with a complete inventory that was initiated under Part Two A. The inventory will also include following documentation:

Plan

- Mercury content in the most commonly purchased chemicals and equipments- Chemical
 and equipment suppliers will be contacted to provide an estimate of the mercury content
 in the most commonly purchased items. The information will be confirmed via MSDS or
 written correspondence from the supplier.
- Volume of chemical used annually-Suppliers that have confirmed mercury content within the chemicals utilized at the WWTP and provide chemicals to the plant will be contacted to provide an estimate of the quantities of the chemicals used annually.
- Number of mercury containing equipment- Number of mercury containing equipment (quantitative inventory) for items identified in the submitted checklist under part II A.

Schedule

- The GSD will provide to the IDEM a progress report of chemicals with mercury content nine (9) months from the effective date that the SMV is incorporated into the renewed GSD NPDES Permit # IN0022977
- The GSD will provide a complete inventory of report of volume of chemical used annually and number of mercury containing equipment chemicals with mercury content nine (9) months from the effective date that the SMV is incorporated into the renewed GSD NPDES Permit # IN0022977

II C(1-5).

Results of a preliminary evaluation of possible mercury sources in the facility's influent consisting of a listing of dental offices, hospitals, educational facilities with laboratories and significant industrial users are enclosed in the (Attachment Part IIC) Appendix IIC

II C(6).

The City attests to the fact that an identification of the responsibilities of the significant industrial users among such possible sources of mercury under P.L. 225-2001 has been undertaken.

II D.

Plan

The purpose of this plan is to complete the identification of sources of mercury to the GSD's influent, including a confirmation of the correct name and address of each source. This will be accomplished with the following steps:

Mailer and Survey

GSD staff will design a set of mailers targeted to each sector or group of possible sources, including, e.g., hospitals and other medical facilities, dental offices and clinics, laboratories at educational institutions, SIUs and other industries, and significant residential and retail sources. The mailer will include information about the City's PMPP and a set of survey questions regarding the potential use of materials or equipment containing mercury. Each recipient will be requested to complete the survey and confirm his/her/its proper name, address and other contact information.

• Follow up Surveys, Site Visits or telephonic confirmation

GSD personnel will send follow-up mailers to those entities on the preliminary list who fail to respond to the initial mailer. If no response is made to such follow up mailers, GSD personnel may make on site visits or call over telephone to confirm preliminary information.

Schedule

GSD personnel will mail the initial letters and surveys within six (6) months and it will complete its evaluation of potential sources of mercury to the GSD Plant's influent, as described above, within nine (9) months after the SMV Approval Date.

PART THREE - POLLUTANT MINIMIZATION PROGRAM PLAN (PMPP) PLANNED ACTIVITIES

III A.

Refer to Appendix III A – III B

6. GSD confirms that the identification of the responsibilities as mentioned above has been undertaken.

III B.

Refer to Appendix III A - III B

III C.

Refer to Appendix III C

III D.

The Gary Sanitary District commits to providing the staff and resources necessary for the adequate implementation of the PMPP as provided.

Implementation of the PMPP will be performed under the direction of the District's Industrial Pretreatment Program (IPP) Coordinator with the support of administrative and technical staff. It is anticipated that approximately 250 working hours will be required to implement and maintain the PMPP with an estimated cost between \$5,000.00 and \$10,000.00. Actual time distribution for each department along with equivalent budget expenses will be included in the Annual Progress Reports.

Gary Sanitary District Streamlined Mercury Variance Application Pollutant Minimization Program Plan (Part III A. and B.)

December, 2010

Sector	Planned Activity	Goal	Measure	Schedule
Wastewater Treatment Facility	Inventory/identification of potential sources of mercury at POTW	Mercury-free where practical	Final inventory and SMV abcumentation from suppliers approval/permit modification	9 months after SMV approval/permit modification
	Review of purchasing policies and procedures	Restrict or eliminate, where practical, purchase of mercury containing equipment and supplies	Adoption of policies and procedures	9 months after SMV approval/permit modification
	Training and awareness of facility staff	Promote BMP implementation	Participation and adherence to program	9 months after SMV approval/permit modification
	Public education program within service area	Education/awareness materials	Participation	9 months after SMV approval/permit modification
	Evaluation of alternatives to mercury containing Mercury free where equipment and materials	Mercury free where practical		9 months after SMV approval/permit modification
	Collection system	Vactor solids from catch basins	CSOOP program and material removed	Ongoing
	Lift stations	Vactor accumulated solids (from lift stations	Vactor accumulated solids CSOOP program and material from lift stations	Ongoing

Gary Sanitary District Streamlined Mercury Variance Application Pollutant Minimization Program Plan (Part III C.)

December, 2010

				1
Sector	Planned Activity	Goal	Measure	Schedule
Medical Facilities	Mail literature on City's PMPP and AHA BMPs	Education/awareness	Date mailed and content	9 months after SMV approval/permit modification
Hospitals	Mail literature on City's PMPP and AHA BMPs	Promote BMP implementation	Date mailed and content	9 months after SMV approval/permit modification
Clinics	Mail literature on City's PMPP and AHA BMPs	Education/awareness	Date mailed and content	9 months after SMV approval/permit modification
Nursing homes	Mail literature on City's PMPP and AHA BMPs	Education/awareness	Date mailed and content	9 months after SMV approval/permit modification
Veterinary clinics	Mail Veterinary BMP literature	Education/awareness	Date mailed and content	9 months after SMV approval/permit modification
	Mail literature on City's PMPP and ADA BMPs	Education/awareness	Date mailed and content	9 months after SMV approval/permit modification
Dental Cimics	Conduct Surveys of use of ADA BMPs	Participation	Date mailed and content	9 months after SMV approval/permit modification
Public and Private Educational	Mail appropriate literature	Education/awareness	Date mailed and Participation	9 months after SMV approval/permit modification
laboratories	On site visit at selected facilities	Promote BMP implementation	Visits accomplished	9 months after SMV approval/permit modification
	Identify appropriate neighborhood or trade associations and make contact	Increased participation	Participation	9 months after SMV approval/permit modification
Significant sources of residential and retail contributors of mercury	Mail chemical/equipment literature	Education/awareness	Mailing accomplished	9 months after SMV approval/permit modification
	Conduct mail surveys	Participation	Participation	9 months after SMV Approval/permit modification

Fact Sheet

December 30, 2011

Gary Sanitary District Wastewater Treatment Plant located at 3600 West Third Avenue Gary, Indiana Lake County

Outfall Location

Latitude:

41° 36' 29" N

Longitude:

87° 23' 19" W

NPDES Permit No. IN0022977

Background

This is the proposed renewal of the NPDES permit for the Gary Sanitary District Wastewater Treatment Plant (WWTP) which was issued on June 13, 2006 and has an expiration date of June 30, 2011. The permittee submitted an application for renewal which was received on December 28, 2010. The permittee currently operates a Class IV, 60 MGD single stage activated sludge treatment facility consisting of a trash rack, four mechanical bar screens, two grit tanks, two cyclone de-gritters, two wet wells, ten primary sedimentation tanks with scum collection systems, six aeration basins, twenty-four secondary clarifiers, phosphorus removal facilities, ten two-cell single media sand filters with mud wells, chlorination/dechlorination facilities, and influent and effluent flow meters. Treatment of sludge includes gravity thickeners, anaerobic digestion and filter belt presses. Final solids are disposed of via landfill.

In addition to the City of Gary, the Gary Sanitary District WWTP provides wastewater collection and treatment for the Cities of Lake Station and Hobart, and the Merrillville Conservancy District. The permittee is authorized to discharge from both Outfall 001A and Outfall 001B. Each outfall is representative of the final effluent discharged from the Wastewater Treatment Plant.

The renewal permit includes mass effluent limitations for CBOD₅, TSS, ammonia-nitrogen and total residual chlorine based on the peak design flow of 120 MGD. The previous permit included mass limits for these parameters based on a flow of 180 MGD. While the 180 MGD flow was based on theoretical design simulation calculations, potential hydraulic bottlenecks in the treatment system indicate that the Gary Sanitary District WWTP may not be able to realistically process 180 MGD. While the mass effluent limitations for CBOD₅, TSS, ammonia-nitrogen and total residual chlorine based on a 120 MGD flow value are more restrictive than those in the previous permit, effluent data indicates that the GSD will be able to comply with the mass limits with permit renewal.

IDEM has included a reopener clause in Part I.C. of the permit to include revised mass effluent limitations for CBOD₅, TSS, ammonia-nitrogen and total residual chlorine under IC 13-18-19-2(a)(2) if IDEM determines that plant stress testing or a comparison of flow values and effluent data demonstrates the capability of sufficient wastewater treatment exceeding the 120 MGD peak design flow.

Collection System

The collection system is comprised of combined sanitary and storm sewers with 12 Combined Sewer Overflow locations. According to a 2004 CSO inspection performed by EPA, the collection system is 90% combined.

CSO Statutory or Regulatory Basis for Permit Provisions

CSOs are point sources subject to NPDES permit requirements, including both technology-based and water quality-based requirements of the CWA and state law. Thus the permit contains provisions IDEM deems necessary to meet water quality standards, as well as technology-based treatment requirements, operation and maintenance requirements, and best management practices.

This permit is based on various provisions of state and federal law, including (1) Title 13 of the Indiana Code; (2) the water quality standards set forth in 327 IAC 2-1.5; (3) the NPDES rules set forth in 327 IAC 2 and 327 IAC 5, including 327 IAC 5-2-8 and 327 IAC 5-2-10; and (4) section 402(q) of the CWA (33 USC § 1342), which requires all permits or orders issued for discharges from municipal CSOs to conform with the provisions of EPA's National CSO Control Policy (58 Fed. Reg. 18688, April 19, 1994).

EPA's CSO Policy contains provisions that, among other things, require permittees to develop and implement minimum technological and operational controls and long term control plans to meet state water quality standards. The permit's penalty provisions are based in large part on IC 13-30. In addition to the regulatory provisions previously cited, the data collection and reporting requirements are based in part on 327 IAC 5-1-3, 327 IAC 5-2-13 and section 402(q) of the CWA. The long term control plan provisions were included to ensure compliance with water quality standards.

Explanation of Effluent Limitations and Conditions

The effluent limitations set forth in Part I of Attachment A are derived in part from the narrative water quality standards set forth in 327 IAC 2-1.5-8. The narrative standards are minimum standards that apply to all waters at all times, and therefore are applicable to all discharges of pollutants. Because EPA has not issued national effluent limitation guidelines for this category of discharges, the technology-based BAT/BCT provisions are based on best professional judgment (BPJ) in addition to section 402(q) of the CWA.

(CSO discharges are not subject to the secondary treatment requirements applicable to publicly owned treatment works because overflow points have been determined to not be part of the treatment plant. Montgomery Environmental Coalition v. Costle, 646 F.2d 568 (D.C. Cir. 1980).)

Spill Reporting Requirements

Reporting requirements associated with the Spill Reporting, Containment, and Response requirements of 327 IAC 2-6.1 are included in Part II.B.2.c. and Part II.C.3. of the NPDES permit. Spills from the permitted facility meeting the definition of a spill under 327 IAC 2-6.1-4(15), the applicability requirements of 327 IAC 2-6.1-1, and the Reportable Spills requirements of 327 IAC 2-6.1-5 (other than those meeting an exclusion under 327 IAC 2-6.1-3 or the criteria outlined below) are subject to the Reporting Responsibilities of 327 IAC 2-6.1-7.

It should be noted that the reporting requirements of 327 IAC 2-6.1 do not apply to those discharges or exceedences that are under the jurisdiction of an applicable permit when the substance in question is covered by the permit and death or acute injury or illness to animals or humans does not occur. In order for a discharge or exceedence to be under the jurisdiction of this NPDES permit, the substance in question (a) must have been discharged in the normal course of operation from an outfall listed in this permit, and (b) must have been discharged from an outfall for which the permittee has authorization to discharge that substance.

Solids Disposal

The permittee is required to dispose of its sludge in accordance with 329 IAC 10, 327 IAC 6.1, or 40 CFR Part 503.

Receiving Stream

The facility discharges to the East Branch of the Grand Calumet River via Outfall 001A and 001B. The receiving water is located within the Lake Michigan drainage basin. The receiving water has a seven day, ten year low flow (Q_{7,10}) of 447 cubic feet per second (289 MGD) at the outfall location. This provides a dilution ratio of receiving stream flow to treated effluent of 4.8:1. The receiving stream is designated for full body contact recreational use and shall be capable of supporting a well-balanced warm water aquatic community in accordance with 327 IAC 2-1.5-5. The East Branch Grand Calumet River from about 0.5 miles upstream of Bridge Street (located upstream of the Gary Sanitary District discharge) to the Indiana Harbor Canal (assessment unit INK0346_04) is on the 2010 303(d) list for impaired biotic communities, oil and grease, *E. coli* and PCBs in fish tissue. Effluent limitations for oil and grease and *E. coli* are included in the permit. While a TMDL for *E. coli* for the Lake Michigan shoreline was approved by U.S. EPA on September 1, 2004 as part of the Lake Michigan TMDL, it does not affect the Gary Sanitary District WWTP discharge. There are no TMDLs for the East Branch of the Grand Calumet River currently in development.

The Indiana portion of the open waters of Lake Michigan is designated in 327 IAC 2-1.5-5(a)(3)(G) as a salmonid water and shall be capable of supporting a salmonid fishery. Public water system intakes are located in the Indiana portion of the open waters of Lake Michigan so it is designated in 327 IAC 2-1.5-5(a)(4) as a public water supply. Additionally, the Indiana portion of the open waters of Lake Michigan is designated in 327 IAC 2-1.5-19(b)(2) as an outstanding state resource water (OSRW).

Industrial Contributions

The permittee accepts industrial flow from Buffington Casino, Canadian National, Chicago Steel, Gary Chicago Airport, Gary Landfill, Gary Landfill (J-Pit location), Indiana American Water Co., Indiana Industrial Investment, Lakeshore Trucking, Loves Travel Shop, Methodist Hospital Northlake, Monosol, Peerless, Schneider National Trucking, Stericycle, Travel Centers of America, US Steel (Broadway), US Steel (Buchannon), and Welsh. Additionally, the permittee accepts wastewater from several satellite communities including Hobart, Lake Station 2 (35th and Florida), Lake Station 3 (23rd and Dekalb), Lake Station 4 (Crossroads), Merrillville 1 (6250 Broadway), Merrillville 2, (6251 Taft St), and Merrillville 3 (1524 E 61st Ave). Based on the industrial flow received by the treatment facility, the permittee is required to operate its approved industrial pretreatment program approved on July 7, 1986.

Provisions for the industrial pretreatment program are included in Part III of this permit renewal. In addition, monitoring requirements and effluent limitations for zinc and monitoring requirements for arsenic, cadmium, chromium, copper, cyanide, iron, lead, nickel, phenols, chloride, sulfate, and fluoride are being included in the permit renewal.

Additional Great Lakes Basin Discharger Requirements

As the permittee discharges into a water body which is located in the Great Lakes basin, it is subject to the water quality standards which are specific to the Great Lakes basin dischargers as found in 327 IAC 2-1.5, 327 IAC 5-1.5 and 327 IAC 5-2. These rules, effective as of February 13, 1997, prohibit any action resulting in a significant lowering of water quality unless an antidegradation demonstration has been completed by the applicant and approved by the IDEM.

A significant lowering of water quality, in accordance with 327 IAC 5-2-11.3(b)(1), occurs when there is a new or increased loading of a bioaccumulative chemical of concern (BCC) from the permitted facility; or a new or increased permit limit for a non-BCC where the new or increased permit limits results in both a calculated increase in the ambient concentration of a pollutant in the receiving water body, and a lowering of water quality greater than a de minimis lowering of water quality. If the permittee plans to pursue any increase in design flow by plant expansion during the term of this permit, then an antidegradation study would be necessary.

As part of the Wasteload Allocation Report performed by this Office's Permits Branch staff on September 20, 2011, antidegradation was considered for zinc as new limits for this parameter are included in the permit renewal. The report determined that the new limits did not cause a significant lowering of water quality in the East Branch of the Grand Calumet River under 327 IAC 5-2-11.3(b) or in the OSRW under 327 IAC 5-2-11.7(a)(2).

As required by 327 IAC 5-2-11.3(b)(2), the permit renewal (Part II.A.17) specifically prohibits the permittee from taking deliberate actions that would result in new or increased discharges of BCCs or new or increased permit limits for non-BCCs without first proving that the new or increased discharge would not result in a significant lowering of water quality, or by submission and approval of an antidegradation demonstration to the IDEM.

Effluent Limitations and Rationale

The effluent limitations proposed herein are based on Indiana Water Quality Standards, NPDES regulations, a Wasteload Allocation analyses (WLA) performed by this Office's Permits Branch staff on April 23, 2004, and a September 20, 2011 Wasteload Allocation Report. These limits are established in accordance with antibacksliding regulations specified in 327 IAC 5-2-10(11)(A). Monitoring frequencies are based upon facility size and type.

For dissolved oxygen dependent parameters, 100% of the stream design flow was utilized for the development of limitations. For toxics not identified as BCCs and non-conventional parameters, 25% of the stream design flow was utilized for the development of the limitations.

The final effluent limitations to be limited and/or monitored include: Flow, Carbonaceous Biochemical Oxygen Demand (CBOD₅), Total Suspended Solids (TSS), Ammonia-nitrogen (NH₃-N), Phosphorus, pH, Dissolved Oxygen (DO), Total Residual Chlorine (TRC), *Escherichia coli (E. coli)*, oil and grease, WET, arsenic, cadmium, chromium, copper, cyanide, iron, lead, mercury, nickel, zinc, phenols, chloride, sulfate, and fluoride. While the previous permit included monitoring requirements for total dissolved solids, these requirements have been omitted from the permit renewal. As water quality criteria are not available for total dissolved solids, continued data collection for this parameter is not considered to be beneficial.

Final Effluent Limitations

The summer monitoring period runs from May 1 through November 30 of each year and the winter monitoring period runs from December 1 through April 30 of each year. The disinfection season runs from April 1 through October 31 of each year. Pursuant to IC 13-18-19-2(a)(2), the mass limits for CBOD₅, TSS, ammonia-nitrogen and total residual chlorine have been calculated utilizing the peak design flow of 120 MGD. This is to facilitate the maximization of flow through the treatment facility in accordance with this Office's CSO policy.

Flow

Flow is to be measured daily as a 24-hour total. Reporting of flow is required by 327 IAC 5-2-13.

$\underline{\text{CBOD}}_5$

CBOD₅ is limited to 5.0 mg/l (5,007 lbs/day) as a monthly average and 7.5 mg/l (7,511 lbs/day) as a weekly average during the summer monitoring period. During the winter monitoring period, CBOD₅ is limited to 8.8 mg/l (8,812 lbs/day) as a monthly average and 13.2 mg/l (13,218 lbs/day) as a weekly average. Monitoring is to be conducted daily by 24-hour composite sampling. The CBOD₅ concentration limitations included in this permit are set in accordance with the WLA performed by this Office's Permits Branch staff on April 23, 2004 and are the same as the concentration limitations found in the facility's previous permit.

TSS

TSS is limited to 6.0 mg/l (6,008 lbs/day) as a monthly average and 9.0 mg/l (9,013 lbs/day) as a weekly average during the summer monitoring period. During the winter monitoring period, TSS is limited to 9.6 mg/l (9,613 lbs/day) as a monthly average and 14.4 mg/l (14,420 lbs/day) as a weekly average. Monitoring is to be conducted daily by 24-hour composite sampling. The TSS concentration limitations included in this permit are the same as the concentration limitations found in the facility's previous permit.

Ammonia-nitrogen

Ammonia-nitrogen is limited to 1.00 mg/l (1,001 lbs/day) as a monthly average and 2.33 mg/l (2,333 lbs/day) as a daily maximum during the summer monitoring period. During the winter monitoring period, ammonia-nitrogen is limited to 1.13 mg/l (1,132 lbs/day) as a monthly average and 2.63 mg/l (2,634 lbs/day) as a daily maximum. Monitoring is to be conducted daily by 24-hour composite sampling. The ammonia-nitrogen concentration limitations included in this permit are set in accordance with the WLA performed by this Office's Permits Branch staff on April 23, 2004 and are the same as the concentration limitations found in the facility's previous permit.

Phosphorus

In accordance with 327 IAC 5-10-2(a) & (b), as the treatment facility discharges into receiving waters located within the Lake Michigan drainage basin, phosphorus removal facilities shall achieve a degree of reduction as prescribed in the sliding scale of phosphorus removal in Part I.A.4., Footnote [4] of the permit, or produce an effluent containing no more than 1.0 mg/l total phosphorus (P), whichever is more stringent. Monitoring is to be conducted daily by 24-hour composite sampling. These phosphorus limitations are the same as the limitations found in the facility's previous permit.

pН

The pH limitations have been based on 40 CFR 133.102 which is cross-referenced in 327 IAC 5-5-3. To ensure conditions necessary for the maintenance of a well-balanced aquatic community, the pH of the final effluent must be between 6.0 and 9.0 standard units in accordance with provisions in 327 IAC 2-1.5-8(c)(2). pH must be measured daily by grab sampling. These pH limitations are the same as the limitations found in the facility's previous permit.

Dissolved Oxygen

Dissolved oxygen shall not fall below 6.0 mg/l as a daily minimum average during the summer monitoring period. During the winter monitoring period, dissolved oxygen shall not fall below 5.0 mg/l as a daily minimum average. These dissolved oxygen limitations are based on the WLA performed by this Office's Permits Branch staff on April 23, 2004 and are the same as the concentration limitations found in the facility's previous permit. Dissolved oxygen measurements must be based on the average of twelve grab samples taken within a 24-hr. period. This monitoring is to be conducted daily.

Total Residual Chlorine

The monthly average Water Quality-Based Effluent Limit (WQBEL) for total residual chlorine is less than the limit of quantitation (LOQ), 0.06 mg/l. Compliance with this permit will be demonstrated if the monthly average effluent level is less than or equal to the monthly average WQBEL. Daily effluent values that are less than the LOQ, used to determine the monthly average effluent levels less than the LOQ, may be assigned a value of zero (0), unless, after considering the number of monitoring results that are greater than the limit of detection (LOD), and applying appropriate statistical techniques, a value other than zero (0) is warranted.

The daily maximum WQBEL for total residual chlorine is greater than or equal to the LOD value, but less than the LOQ value specified in the permit. Compliance with this permit will be demonstrated if the observed daily effluent concentrations are less than the LOQ. For daily maximum mass limitations based on WQBEL's less than the LOQ, compliance with the daily maximum mass value is based on the LOQ value.

Compliance with the daily maximum mass value will be demonstrated if the calculated mass value is less than 60.1 lbs/day. The total residual chlorine concentration limitations are the same as the limitations found in the facility's previous permit.

E. coli

The *E. coli* limitations and monitoring requirements apply from April 1 through October 31, annually. *E. coli* is limited to 125 count/100 ml as a monthly average, and 235 count/100 ml as a daily maximum. The monthly average *E. coli* value shall be calculated as a geometric mean. This monitoring is to be conducted daily by grab sampling. These *E. coli* limitations are set in accordance with 327 IAC 2-1.5-8(e) as cross-referenced with 327 IAC 5-2-11.4(d)(2).

Oil and Grease

As was the case in the previous permit, oil and grease is limited to 10 mg/l as a daily maximum limit. Monitoring for oil and grease is to be conducted daily by 24-hour composite sampling.

Mercury

The Reasonable Potential Analysis performed in conjunction with the September 20, 2011 Wasteload Allocation Report by this Office's Permits Branch staff determined that the PEQ for mercury is greater than the applicable PEL. Therefore, in accordance with 327 IAC 5-2-11.5(b), WQBELs for mercury are being included in this permit. The mercury WQBELs are based on the wildlife criterion in 327 IAC 2-1.5-8(b)(6), Table 8-4. In accordance with 327 IAC 5-2-11.4(b)(1) the criteria for mercury are applied without the utilization of a mixing zone. Because the permittee applied for, and IDEM approved, a streamlined mercury variance under 327 IAC 5-3.5, permit compliance for mercury will be based on compliance with the interim discharge limit identified in Table 4 of the permit. The interim discharge limit for mercury is described in the Streamlined Mercury Variance section of this Fact Sheet.

Metals/Non-conventional Pollutants

The Reasonable Potential Analysis performed in conjunction with the September 20, 2011 Wasteload Allocation Report by this Office's Permits Branch staff determined that the PEQ for zinc is greater than the applicable PEL. Therefore, in accordance with 327 IAC 5-2-11.5(b), WQBELs for zinc are being included in this permit. Zinc is limited to 0.19 mg/l (95 lbs/day) as a monthly average and 0.39 mg/l (195 lbs/day) as a daily maximum. Monitoring for zinc is to be conducted one time weekly by 24-Hr. composite sampling. In addition to effluent monitoring, the permittee is required to monitor the influent wastestream for zinc at a frequency of two times monthly utilizing 24-Hr. composite sampling.

The Reasonable Potential Analysis also revealed that the PEQs for arsenic, cadmium, chromium, copper, cyanide, iron, lead, nickel, phenols, chloride, sulfate and fluoride are less than the corresponding PELs. Therefore, effluent limitations have not been included in the permit for the aforementioned pollutants. However, due to the industrial contribution to the Gary Sanitary District collection system, monitoring requirements for these metals are being retained, at a reduced monitoring frequency (quarterly). In addition to effluent monitoring, the permittee is required to monitor the influent wastestream for referenced pollutants at a frequency of quarterly utilizing 24-Hr. composite sampling.

Whole Effluent Toxicity Testing

The permittee submitted a Whole Effluent Toxicity Tests (WETT) with the renewal application as required in 327 IAC 5-2-3(g). Indiana's regulations for the Great Lakes system include narrative criteria with numeric interpretations for acute (2-1.5-8(b)(1)(E)(ii)) and chronic (2-1.5-8(b)(2)(A)(iv)) whole effluent toxicity (WET) and a procedure for conducting reasonable potential for WET (5-2-11.5(c)(1)). The U.S. EPA did not approve the reasonable potential procedure for WET so Indiana is now required under 40 CFR Part 132.6(c) to use the reasonable potential procedure in Paragraphs C.1 and D of Procedure 6 in Appendix F of 40 CFR Part 132. IDEM used this procedure in conducting the reasonable potential analysis for WET.

The analysis is included in the Wasteload Allocation Analysis conducted by this Office's Permits Branch staff on September 20, 2011. The results of the reasonable potential analysis for WET show that the discharge from Outfall 001A and Outfall 001B has a reasonable potential to exceed the numeric interpretation of the narrative criterion for chronic WET. Therefore, WQBELs are required for WET.

Once a determination is made that WQBELs are required for WET, the WQBELs are established in accordance with 327 IAC 5-2-11.6(d). This provision allows a case-by-case determination of whether to establish a WQBEL for only acute or chronic WET, or WQBELs for both acute and chronic WET. The chronic WQBEL was established as a monthly average limit and set equal to the chronic wasteload allocation in accordance with 327 5-2-11.6(d)(1)(E). The acute WQBEL was established as a daily maximum limit and set equal to the acute wasteload allocation in accordance with 327 5-2-11.6(d)(1)(E). The monthly average WQBEL for WET is 2.2 chronic toxicity units (TUc) and chronic WET testing is required twice annually. The daily maximum WQBEL for WET is 1.0 acute toxicity units (TUa) and acute WET testing is required twice annually.

Streamlined Mercury Variance

The SMV provides a streamlined process for obtaining a variance from a water quality criterion used to establish WQBELs for mercury. The goal of the SMV is to reduce the effluent levels of mercury towards, and achieve as soon as practicable, compliance with the mercury WQBELs. Unlike the individual variance procedure under 327 IAC 2-1-8.8, the Streamlined Mercury Variance (SMV) focuses on pollution prevention and source control measures rather than pollutant removal (treatment) technologies to achieve mercury reduction in the effluent.

The NPDES permit includes WQBEL's for mercury based on effluent data indicating that mercury is discharged at a level that has the reasonable potential to cause or contribute to an excursion above the numeric criterion for mercury contained in 327 IAC 2-1.5-8(b)(3), Table 1. IDEM received a Streamlined Mercury Variance (SMV) application from the Gary Sanitary District on December 28, 2010. After subsequent revisions to the SMV application were received on May 12, 2011, IDEM determined that the SMV application complies with the requirements of the SMV rule (327 IAC 5-3.5) and noticed the receipt of a complete SMV under Public Notice 2011-6B-SMV from June 8, 2011 through July 8, 2011. IDEM has incorporated the SMV as a condition of the NPDES permit.

The SMV will remain in effect until the permit expires under IC 13-14-8-9. Pursuant to IC 13-14-8-9(c), when the SMV is incorporated into a permit extended under IC 13-15-3-6 (administratively extended), the SMV will remain in effect until the permit expires. The permittee may renew the SMV under the provisions of 327 IAC 5-3.5-7.

SMV Interim Discharge Limit

Table 4 of the permit includes an interim discharge limit for mercury of 3.05 ng/l. The interim discharge limit was developed in accordance with the provisions of 327 IAC 5-3.5-8, using the highest daily mercury value from the most recent 12 to 24 month period. Compliance with the interim discharge limit, expressed as an annual average limitation, will be achieved when the average discharge concentration of mercury over any rolling twelve month period is less than the interim discharge limit.

Mercury monitoring is to be conducted bi-monthly (i.e. every other month) for the term of the permit. Bi-monthly monitoring shall be conducted in the months of February, April, June, August, October, and December of each year. Mercury monitoring and analysis will be performed using EPA Test Method 1631, Revision E. If Method 1631, Revision E is further revised during the term of this permit, the permittee and/or its contract laboratory is required to utilize the most current version of the method immediately after approval by EPA.

SMV Pollutant Minimization Program Plan (PMPP)

The SMV rule requires the permittee to develop a Pollutant Minimization Program Plan (PMPP) which addresses source identification and planned activities intended to minimize the release of mercury to waters of the state. The PMPP was public noticed prior to submittal to IDEM in accordance with 327 IAC 5-3.5-9(c). No comments were received during the public notice period. The portions of the permittee's PMPP that are enforceable under the NPDES permit (i.e., all plans, planned activities and schedules) are appended in the NPDES permit as Attachment B.

SMV Annual Reports

The permittee is required to submit annual reports outlining the facility's progress toward fulfilling the requirements of the PMPP. The annual report must describe the progress toward fulfilling each PMPP requirement, the results of all mercury monitoring within the previous year, and the steps taken to implement the planned activities outlined under the PMPP. The annual report may also include documentation of chemical and equipment replacements, staff education programs, and other initiatives regarding mercury awareness or reductions. The complete inventory and complete evaluation required by the PMPP, as well as proposed adjustments to the PMPP, may be submitted as part of the annual report. The permittee will submit the annual reports to IDEM on the anniversary of the effective date that incorporates the SMV into the NPDES permit.

IDEM will review the annual report when considering renewal of an SMV in accordance with 327 IAC 5-3.5-7(b). This rule states that IDEM may renew an initial SMV application in accordance with IC 13-14-8-9 if the applicant demonstrates that implementation of the PMPP has achieved progress toward the goal of reducing mercury from its discharge except as provided in subsection (d). Subsection (d) states that a PMPP must be revised if implementation of the original PMPP does not lead to demonstrable progress in minimizing the discharge of mercury. If the applicant can provide information, as part of a revision to a PMPP, that demonstrates there is no known reasonable additional action that will reduce mercury, the PMPP may remain as previously approved.

Backsliding

None of the concentration limits included in this permit conflict with antibacksliding regulations found in 327 IAC 5-2-10(11)(A), therefore, backsliding is not an issue.

Reopening Clauses

Eight reopening clauses were incorporated into the permit in Part I.C. One clause is to incorporate effluent limits from any further wasteload allocations performed, a second clause is to allow for changes in the sludge disposal standards, a third clause is to incorporate any applicable effluent limitation or standard issued or approved under section 301(b)(2)(C), (D) and (E), 304(b)(2), and 307(a)(2) of the Clean Water Act, a fourth clause is to incorporate monitoring requirements and effluent limitations for applicable pollutants, a fifth clause is to include whole effluent toxicity limitations or to include limitations for specific toxicants, a sixth clause is to include a case-specific Method Detection Level (MDL), a seventh clause is to include revised mass effluent limitations for CBOD₅, TSS, ammonia-nitrogen, and an eighth clause is to include revised Streamlined Mercury Variance (SMV) and/or Pollutant minimization Program Plan (PMPP) requirements where appropriate.

Compliance Status

The permittee entered into an Agreed Order (Order No. 2007-17300-W) with this Office on April 28, 2008. The Agreed Order contains an order for the permittee to establish procedures ensuring extrajurisdictional industrial users served by the Gary Sanitary District are subject to enforceable pretreatment standards and requirements.

The permittee is also operating under a Modified Consent Decree through the U.S. EPA requiring the Gary Sanitary District to address the disposal of waste material in the Ralston Street Lagoon as well as the clean up of sediment in the Grand Calumet River.

Expiration Date

A five-year NPDES permit is proposed.

Drafted by: Bill S

Bill Stenner

December 30, 2011

STATE OF INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

PUBLIC NOTICE NO. 2012- 1A - RD DATE OF NOTICE: JANUARY 6, 2012 DATE RESPONSE DUE: FEBRUARY 6, 2012

The Office of Water Quality proposes the following NPDES DRAFT PERMIT:

MAJOR – RENEWAL

GARY SANITARY DISTRICT WWTP, Permit No. IN0022977, LAKE COUNTY, 3600 W Third Av, Gary, IN. This municipal facility discharges 60.0 million gallons daily of sanitary, industrial & combined sewer wastewater into East Branch & West Branch of the Grand Calumet River. Permit Manager: Bill Stenner, 317/233-1449, bstenner@idem.in.gov.

PROCEDURES TO FILE A RESPONSE

Draft documents are available for inspection at IDEM, Office of Water Quality, 100 N. Senate Av, Indianapolis, IN - 12th floor (east end elevators) from 9 – 4, M - F, (copies 10¢ per page). A copy of the Draft Permit is on file at the local County Health Department. Please tell others you think would be interested in this matter. See these sites for your rights & responsibilities: http://www.in.gov/idem/5474.htm; Public Participation: http://www.in.gov/idem/5803.htm.

Response Comments: The proposed decision to issue a permit is tentative. Interested persons are invited to submit written comments on the Draft permit. All comments must be postmarked no later than the Response Date noted to be considered in the decision to issue a Final permit. Deliver or mail all requests or comments to the attention of the Permit Writer at the above address, (mail code 65-42 PS).

To Request a Public Hearing:

Any person may request a public hearing. A written request must be submitted to the above address on or before the Response Date noted. The written request shall include: the name and address of the person making the request, the interest of the person making the request, persons represented by the person making the request, the reason for the request and the issues proposed for consideration at the hearing. The Department will determine whether to hold a public hearing based upon the comments and the rationale for the request. Public Notice of such a hearing will be circulated in at least one newspaper in the geographical area of the discharge and to those persons submitting comments and/or on the mailing list at least 30 days prior to the hearing.